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Bd. Jan. 1880.
P281.3

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29 Dec. 1879.

THE

NATIONAL

QUARTERLY REVIEW.

EDITED BY

EDWARD I. SEARS, LL. D.

"Pulchrum est bene facere reipublicæ, etiam bene dicere haud absurdum est"

VOL. XVI. NOS. FOR DECEMBER, 1867, AND MARCH, 1868.

NEW YORK:
EDWARD I. SEARS, EDITOR AND PROPRIETOR.
61 BROADWAY.

1868.

P281.3

Entered according to Act of Congress, in the year 1868, by
EDWARD I. SEARS,
In the Clerk's Office of the District Court of the United States, for the Southern District of New York.

Library of the Boston Museum of Fine Arts
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THE NATIONAL QUARTERLY REVIEW.

EDITED BY

EDWARD I. SEARS, LL. D.

VOL. XVI. No. XXXI. DECEMBER, 1867.

"Pulchrum est bene facere reipublicæ, etiam bene dicere haud absurdum est."

NEW YORK:
EDWARD I. SEARS, EDITOR AND PROPRIETOR.
61 BROADWAY.

GENERAL AGENTS.

NEW YORK: AMERICAN NEWS CO., 121 NASSAU STREET. BOSTON: A. WILLIAMS & CO., 100 WASHINGTON STREET. PHILADELPHIA: JAMES K. SIMON, SOUTH SIXTH STREET. LONDON: TRUBNER & CO., 60 PATERNOSTER ROW. PARIS: VICTOR ALEXI. 19 RUE DU MAIL.

1867.

ENTERED according to Act of Congress in, the year 1867, by EDWARD I. SEARS, in the Clerk's Office of the District Court of the United States for the Southern District of New York.

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CONTENTS OF NO. XXXI.

ART. PAGE.

I. GREEK COMEDY—MENANDER..... 3

1. *Commentationum de reliquis Comœdiæ Atticæ antiquæ.* Libri duo: A. THEOD. BERGK.
2. *Menandri et Philemonis Reliquæ:* A. M. MEINEKE.
3. *Cours de littérature dramatique.* Par A. W. SCHLEGEL.
4. *Essai historique et littéraire sur la comédie de Ménandre.* Par CH. BENOIT.
5. *Ménandre; Etude historique et littéraire.* Par GUILLAUME GUIZOT.

II. ANIMAL MAGNETISM; ITS HISTORY, CHARACTER, AND TENDENCY..... 23

1. *Lettres physiologiques et moral sur le magnétisme animal.* Par DOCTEUR DUPAU.
2. *A New and Complete Library of Mesmerism and Psychology.*
3. *Rapports et discussions sur le magnétisme animal.* Par M. FOSSAC.
4. *Histoire critique du magnétisme animal.* Par M. DELEUZE.

III. MANAGEMENT OF OUR FINANCES; RUINOUS INFLUENCE OF PAPER MONEY..... 54

1. *Report of the Secretary of the Treasury on the State of the Finances,* for the year 1865.
2. *Report of the Secretary of the Treasury on the State of the Finances,* for the year 1866.

IV. LAFAYETTE AS A PATRIOT AND SOLDIER..... 71

1. *Lafayette et la Revolution de* 1830; *Histoire des choses et des hommes de Juillet.* Par B. SARRAUS, jeune.
2. *Memoirs, Correspondence, and Manuscripts of General Lafayette.* Published by his Family.
3. *Memoirs of Gilbert Motier La Fayette.* By Gen. H. L. VILLAUME DU COUDRAY (Peter Feldman).

V. NEBULAR ASTRONOMY..... 95

1. *Outlines of Astronomy.* By Sir J. F. W. HERSCHEL.
2. *Cosmos.* By ALEXANDER VON HUMBOLDT.
3. *Philosophical Transactions of the Royal Society of London for* 1850 *and for* 1861.

ART. PAGE.

VI. MARTIN LUTHER AND THE OLD CHURCH..... 108

1. *Die reformatorischen Schriften* (The Reformatory Writings of) *Dr. Martin Luther's.* Von ZIMMERMANN.
2. *Vita Lutheri* (Life of Luther). PH. MELANCTHON.
3. *Historia de Actis et Scriptis Lutheri* (History of the Life and Writings of Luther). COCHTÆUS.
4. *The Life of Martin Luther.* Related from Original Authorities; with sixteen engravings. By MORITZ MEURER. Translated from the German by a Pastor of the Evangelical Lutheran Church.
5. *The Life of Martin Luther.* Gathered from his own Writings. By M. MICHELET, author of "History of France," &c., &c. Translated by G. H. SMITH, F. G. S.
6. *The Table Talk* (Tischreden) *or Familiar Discourse of Martin Luther.* Translated by WILLIAM HAZLITT, Esq.
7. *History of the Reformation in the Sixteenth Century.* By MERLE D'AUBIGNÉ.

VII. MEDIÆVAL GERMAN LITERATURE—ESCHENBACH..... 136

1. *Parcival. Rittergedicht von Wolfram von Eschenbach. Uebersetzt und erläutert von* DR. K. SIMROCK. *Dritte Ausgabe.* J. G. COTTA.
2. VILMAR'S *Literatur-Geschichte. Elfte Auflage.*
3. GERVINIUS *Geschichte der deutschen Dichtung.*

VIII. HERALDRY; ITS ORIGIN AND INFLUENCE..... 160

1. *Inquiries into the Origin and Progress of the Science of Heraldry in England.* JAMES DALLAWAY, A. M.
2. *The Curiosities of Heraldry.* By MARK ANTHONY LOWE.
3. *Die Hauptstücke der Wappenwissenschaft.* Von DR. CHR. SAMUEL THEODOR BEND.
4. *Nouveau Traité Historique et Archéologique de la vraie et parfaite Science des Armoiries.* Par M. LE MIS DE MAGNY.

IX. NOTICES AND CRITICISMS..... 178
Belles-lettres..... 178
Travels..... 191
History and Biography..... 195
Education..... 198
Miscellaneous..... 200
Insurance..... 202

THE

NATIONAL QUARTERLY REVIEW.

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THE world would boast much less of the progress it has made if it could estimate the value of the treasures it has lost. None capable of forming an intelligent opinion on the subject can deny that the greatest intellectual productions we possess are thousands of years old ; these are our models ; and they are received as such by the greatest geniuses of all nations. Except in a few instances we have but fragments of the works of the ancients ; of these none have reached us complete, and, in general, it is the best parts that have been lost.

But how many great thinkers were there who have left us nothing but their fame? This class are far more numerous than those whose works have reached us, even in fragments. Thus we have not the smallest specimen of the works of Anaxagoras, Aristides, Epaminondas, Pythagoras, Epicurus, or Pericles ; even Socrates, the head of the greatest school of philosophers that has ever existed, we know only through Plato and Xenophon.

No historical fact is more fully attested than that Menander, whom we intend to make the subject of the present article, was the greatest of all the comic writers of antiquity; yet, although he wrote one hundred and five (105),* or one hundred and eight (108) comedies,† not one has come down to us—not even a scene. We have a few brief fragments, and some detached lines—nothing more. The rest we know from his contemporaries, and from the poets, grammarians, and rhetoricians that flourished at different periods during the two or three centuries subsequent to his death. All these regard his superiority in comedy as indisputable as that of Homer in epic poetry. Even the author of the Iliad, himself, has hardly elicited higher admiration from the most competent judges that Greece and Rome have produced since Menander's time.

This we shall see as we proceed. In the meantime we may ask, should such an author be forgotten? May we not learn much from his life, and the fate of his productions? Since it is only by chance that we have learned that such works as those of Menander have ever existed, may we not well believe those indefatigable explorers of the past, who assert that for one valuable ancient work that has reached us at least twenty have accidently perished in times of war and anarchy, or been wantonly destroyed by the barbarian conqueror, or by the still more barbarous, religious fanatic?

Before making any attempt to indicate the peculiar character of Menander's comedies, we will take a brief glance at the author's life; for, although it contains little that is peculiar, there are certain features in it that aids us in forming an opinion of his productions. Menander was born at Athens three hundred and forty-two years before our era—in the third year of the 190th Olympiad. His father, Diopithes, is mentioned with honour in Greek history as having commanded the Athenians on the Hellespont. Like most general officers in the service of rebublics, certain charges were made against him by his political opponents; but he had the glory of being defended by Demosthenes in one of his noblest orations, namely that On the Affairs of the Chersonese. This fact has led some of the biographers of the poet to represent that a strong friendship had existed between him and the orator; but the latter must have been a mere child—

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* Appolod., pp. 17, 4. † Suidas.

scarcely out of his cradle, when Demosthenes delivered the last of his renowned orations.

Many anecdotes are related of Menander, illustrative of the precocity of his genius; but these claim no particular attention; they rest on no better foundation than the familiar friendship said to have subsisted between him and Demosthenes. There is no doubt, however, that he had great advantages in his youth. His mother, Hegistrate, had received the highest education which Athens—still the chief seat of refined learning of the world—was capable of affording, and she spared no pains in cultivating the mind of the future poet. When she felt that she could teach him herself no longer, she placed him under the tuition of the philosopher Theophrastus, one of the most learned men and greatest moralists of his time.* After having been thoroughly educated he was placed in charge of his uncle, Alexis, the comic poet,† not with the view of his learning to write comedy, but in order that he might profit by his uncle's conversational powers, which had become as famous in Athens as those of Dr. Johnson had become in London in modern times.

But these were not the only important influences brought to bear on Menander in early youth. He and Epicurus were born in the same year; the latter only a few months later than the former. While the poet and philosopher were still young, they contracted a strong friendship for each other, which was severed only by death. On account of this intimacy, Menander was represented, at least by his enemies, as an Epicurean plunged into all the refined excesses of his time. Indeed, there is good reason to believe, as we shall see in time, that there was some foundation for the charge. Whatever may have been the habits of Menander, it seems certain that he entirely concurred with Epicurus in regarding mental tranquillity, material well-being, intellectual enjoyments, and sensual pleasures as the essential objects of life. It is equally certain that the poet had the highest admiration for the philosopher; this is beautifully illustratred in an epigram still extant. Because the fathers of Themistocles and Epicurus had the same name the poet, regarding the latter as brothers, congratulates Epicurus on having freed his country from fanaticism as the honoured son of Diocles had freed it from slavery. His

* Diog. Laert., pp. 5, 86. † Proleg. Aristoph., p. 30.

principal accusers are Phædrus and Suidas. The former represents him as paying his compliments to Demetrius Phalereus, perfumed all over with flowing garment, and advancing with an affected and languid step :

> " Unguento delibitus vestitu adfluens
> Veniebat gressu delicato et languido. "[o]

The character given of him by Suidas is that of one " mad after women " (*insanus post mulieres*), and this seems confirmed by Plutarch, who styles him " the chief priest of love." But, whatever were the failings of Menander, it is beyond question that he was respected and esteemed by all capable of appreciating superior culture and genius. It is not alone those occupying the highest rank in Athens, including Demetrius Phalereus, that were desirous of enjoying his society ; we are told by the elder Pliny that the kings of Egypt and Macedonia, who were the greatest in the world in their time, sent him the most pressing invitations to take up his abode with them, the king of Egypt, Ptolemy Lagus, offering to send a fleet to secure his safe conveyance. But all the splendour of Egypt could not induce Menander to abandon Athens. This is, also, attributed to his amorous disposition. Among the famous " imaginary " letters of Alciphron is one from Menander to his mistress Glycera, and one from Glycera to Menander. The poet informs his mistress that he would not abandon her for all the grandeur of the earth ; her reply is full of tenderness. In another letter, however, she is rather doubtful of his constancy, partly on account of his susceptible nature, and partly on account of his irresistible personal attractions.

Whatever may have been his feelings towards the other sex, it is certain that he was one of the handsomest men of his time. Many beautiful fragments of ancient art attest this fact. Several of the best artists of his time seemed to have taken delight in impressing his features on marble. Nearly a dozen portraits of him are still extant ; but by far the best is a statue to be be seen in one of the galleries of the Vatican at Rome. A. W. Schlegel was the first to direct the attention of the literary world to this beautiful and interesting piece of sculpture ; and M. W. Guizot was so much delighted with it that he prefixed an engraving of it to the title-page of his work on Menander, which he opens

[o] Phædr. Fab., VI. I.

with a description of the statue, believing that there can be no better introduction to the intellectual and moral character of the poet. That he is right in this none who see the engraving will deny; the author's description is so graphic and elegant that no translation could do it justice—a fact which will be readily admitted by every competent judge from the following extract:

"Tous ceux qui se plaisent aux sublimes et charmantes choses de l'esprit choisiraient volontiers ce penseur amiable pour hôte et pour Dieu Lare de leur bibliothèque. Sa tête est un peu penchée, et tournée à demi vers la gauche; ni les rides de la vieillesse ni les angoisses de la douleur ne l'ont contractée ou flétrie; mais l'habitude de la réflexion a imprimé sur ce front large et haut des signes austères; et en même temps la bouche relevée et doucement sevrée par un sourire contenu semble prête à transformer en piquantes épigrammes les pensées qui s'agitent sous ce front sérieux. L'aisance d'un esprit facile, la tranquillité que donne la longue expérience des hommes et de soi-même, la grâce d'une gaîté non forcée d'une moquerie indulgente, respirent dans les mêmes traits. Les prunelles ne sont pas indiquées, mais les yeux sans regard ont une profondeur et une vie qui étonnent. Ils suivent et embrassent une longue rangée de statues, comme si l'homme dont nous avons là l'image voulait encore, maître lui-même, rechercher, sur les marbres ses contemporains, les secrets de l'âme humaine qu'il avait étudiés jadis. Cet homme s'appelait Ménandre."—*Guizot*, p. 5.

Before we deduce any inference from the various portraits taken of Menander by contemporary artists, it is well to remember that in his time public opinion, in regard to portraits, was very different from what it is at the present day. An Athenian artist who took a portrait of a man merely because he was rich, disgraced himself, and he was liable to be punished besides for violating a law that was as old as the time of Solon. A similar law was in force in Rome even under the Republic. But, according to the Roman law, any old, respectable families could have the portraits (*imagines*) of their ancestors;* whereas, among the Athenians, the privilege was confined to those who distinguished themselves by their intellectual labours, and to those who rendered themselves illustrious by their patriotism and bravery. Those who were most favoured in this respect at Athens were the dramatic poets; the orators ranked next; then the historians, then the grammarians or critics, then the minor poets, &c.

It is almost superfluous to remark that the number of portraits taken of a member of any class depended much on his own taste and diposition. The vain poet or his-

* Sallust Bellum Jug.

torian had ten times as many portraits as the modest one, if the former happened to be able to pay for them, and this is one of the strongest arguments adduced in support of the alleged Epicureanism of Menander. It is certainly true that we have very few, if any, genuine portraits of Æschylus, Sophocles, or Aristophanes. We have only one of Demosthenes which has any pretension to genuinenesss. There are two extant which are believed to be true portraits of Thucydides; but there is probably not one of Homer, not to mention Socrates, Plato, Aristotle, &c.

The number of portraits, then, cannot be regarded as a safe criterion of the esteem in which an Athenian author was held by his contemporaries. Human nature being the same at all times, one was doubtless as liable to be deceived in entering an Athenian studio in the time of Menander, as he would be to-day in entering a photograph gallery in Broadway. In the latter he would find twenty authors of the lowest or worst class—mere pretenders—for one of the higher or even third class—one who is entitled to be ranked in any class.

But it is not necessary to depend on the portraits of Menander in order to be convinced of the high esteem in which he was held as an author by his contemporaries, and by all competent judges since his time. He may have been vain in this respect, forming an exception to the general rule, that it is those who are least entitled to admiration for the powers of their intellect, or who have no intellectual powers, except in their own imagination, who take most pains to cause themselves, at least to seem to be admired. Sometimes, indeed, men of genius are vain, but very rarely; those of the higher class never. The latter are content with deserving fame and admiration.

It is, therefore, of little consequence whether Menander was vain or not, any further than his example might influence others. But, whatever difference of opinion there may be on this subject, there is none among the ancient critics who had an opportunity of examining his writings as to his superiority as a comic dramatist. Modern critics of all nations have the highest admiration for the plays of Aristophanes. None can deny that they are the productions of a great mind; and few doubt that they exercised a powerful influence on the Athenians of all classes in the author's time. It is certain that no author was more feared than Aristophanes. Even Socrates did not feel altogether at ease in his presence; the philosopher admitted himself,

though indirectly and incidentally, that he was more concerned at what the dramatic satirist might say than all others. These facts we have an opportunity of testing for ourselves—they are beyond dispute. We cannot test the influence of Menander in the same way, because we do not possess any complete part of his works. But those who were acquainted with them describe their characteristics.

If it is asked who is at once the most intelligent and most faithful of biographers, the almost universal reply will be "Plutarch." Nor can the fact be denied. Plutarch was thoroughly educated. Although a Greek by birth and education, he was a citizen of the world, having travelled into every country that possessed any enlightenment in his time, remaining in each a certain period—which, in general, was proportioned to the amount of knowledge to be obtained in it —and, accordingly, spending a considerable portion of his life in Rome. There is no reason to suspect that a man of this character, the author of works like "Plutarch's Lives," would institute an unjust comparison between two of his countrymen—Menander and Aristophanes—especially at a time when his readers had the works of each within their reach, and could, therefore, compare them for themselves. Nothing is more improbable than that one who is everywhere so careful in his statements—so evidently cautious of giving the critics opportunities of exposing his errors—would deliberately exaggerate the merits of Menander, and depreciate those of Aristophanes. What but discredit could he have expected to gain by such conduct.

But let us see the estimate which Plutarch gives of the respective merits of the two dramatists. "Menander," he says, "knows how to adapt his style, and to proportion its tone to all, without restricting the comic, but without exaggerating it. He never loses sight of nature, and the ease and flexibility of his expression could not be surpassed. It may be said that it is always equal to itself, and always different according as one or the other is necessary; like a limpid stream which, running between banks which are unequal and tortuous, assumes all their forms while losing nothing of its purity. He writes like a man of genius; like a man accustomed to good society; he is calculated to be read, represented, learned by heart—to please in all places and in all times; and one is not surprised, in reading his pieces, that he has the reputation of

being the man of his epoch who expressed himself most agreeably, whether in conversation or in writing."*

Had any credible authority given a different report we might have doubted the accuracy of Plutarch's statements, notwithstanding his strong claims on our confidence and respect; but no such report is found throughout the whole range of classical literature. On the contrary, the highest praise bestowed by Plutarch is fully sustained by men who also are everywhere regarded as authorities. But before we allude more definitely to these, let us see what is the same critic's estimate of Aristophanes, in order that we may judge from it, with the aid of Aristophanes' works, whether Plutarch's views on style, expression, &c., are in accordance with the received canons. "He (Aristophanes) exaggerates nature; and addresses himself to the populace rather than to the respectable class; his style is marred by continual inconsistencies, now rising into bombast, and anon familiar even to vulgarity, and buffoon—like even to puerility. In him one cannot distinguish the son from the father, the denizen of the city from the peasant, the warrior from the tradesman, the god from the valet. His impudence can be endured only by the vulgar; his wit is bitter, sharp, hurtful; his pleasantries turn constantly on puns and gross equivoques, or torturous and licentious illusions. With him finesse becomes malignity, naiveté becomes coarseness; his railleries are more worthy of being hissed than they are capable of exciting laughter; his gaiety is but effrontery; finally, he does not write in order to please men of taste, but to flatter every wickedness and debauchery." †

This is pretty severe on Aristophanes, but it is not unjust. The poet who satirized almost every prominent man of his day whom he did not happen to like, including the greatest of philosophers, has, perhaps, had no equal anywhere else; even at Athens he was not approached in wit, humour, or the purity of his Greek, by any other comic writer except Menander, who surpassed him. Assuming, as some allege, that Plutarch was prejudiced against Aristophanes of which there is not the slightest evidence, it could not be said that all the comic dramatists of Rome were similarly prejudiced, for all, especially the best, preferred to take Menander for their model. The superiority of Terence above all other Roman

* Aristophanis et Menandri Comparatio, edit.—*Reiske*, iv., p. 391. † Ib.

dramatists is universally acknowledged. By the common consent of scholars, his style is the perfection of the Latin; even that of Horace or Virgil is not equal to it. No further evidence than this would be necessary to show that the culture of Terence was of the highest order. But be it remembered that of the six plays of his which have come down to us at least four are translated directly, or compiled from one, two, or three of the comedies of Menander. He translated three at Rome, and he was so much delighted with them, that he went to Athens for the express purpose of perfecting himself in the peculiar idioms of Attic Greek. Having thus greatly improved his qualifications, he carefully revised his first versions, and added others which were much more elegant. Aulus Gellius tells us that when he and his literary friends first read these Latin comedies, they unanimously agreed that nothing could surpass their elegance and beauty.* But they had not yet seen the original; when they had read Menander in his native Attic they did not hesitate to give a different verdict. Having compared the translations with the original, passage by passage, the former seemed mean, coarse, and obscure.† The plays thus compared with the original are the "Andria," the "Eunuch," the "Adelphi," and the "Heautontimoroumenos," with all of which every classical student, who has any just pretentions to the name, is familiar, and none have read them intelligibly without admiring them. Yet Aulus Gellius, an excellent authority, declares, after a careful comparison, that they are but faint copies of the original. Other ancient critics tell us that some of the noblest passages in Menander's comedies have been omitted by Terence as unsuitable for a Roman audience; while in other instances he has taken fragments from different plays, and combined them into one act or scene.

Among the other Roman writers, who either translated or imitated Menander, are Afranius, Cæcilius, Plautus, and Luscius Lavinius. Horace, a severe critic as well as poet, frequently speaks of Menander, and always with admiration.‡ In the very same fable in which Phædrus ridicules him as an Epicurean he styles him the "noble comedian" (*nobilis*

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* Lepidè quidem et venustè scriptæ videantur prorsus et melius posse fieri nihil censeas.

† Jacere et sordere incipiunt quæ Latina sunt; ita Græcorum quas æmulari requiverunt facetiis atque luminibus obsolescunt.

‡ Dicit[illegible] Alfrani toga Menandro, Epist. Lib. ii., 1.

comœdus). In a similar spirit of admiration Persius introduces a whole scene from Menander's "Andria" into his best Satire (fifth). Nor is the querulous Ovid less enthusiastic in his admiration than even Terence himself; for it is the former who prophesied that, as long as there existed a faithless servant, an exacting father, a deceitful procuress, a seductive courtezan, Menander would live:

> "Cun fallax servus omus pater improba lena,
> Vixent, et merlhix blanda, Menander erit."

Nor did the Roman prose writers, including historians, orators, and professional critics, admire Menander less than the poets. Julius Cæsar regarded the comedies of Terence as by far the best in the Latin language; at the same time the highest praise he bestowed on Terence himself was to call him "the half of Menander" or "Menander halved."* Of all the Roman critics the fairest and most judicious is Quintilian, who also yields the palm of superior excellence in comedy to Menander. In speaking of the benefit of reading to the student, he remarks: "Of comedy, which may contribute very much to eloquence, as it extends to all sorts of characters and passions, I will state a little further on, in the proper place, the good which I think it may do to boys; when their morals are out of danger, it will be among the subjects to be chiefly read. *It is of Menander that I speak*, though I would not set aside other comic writers; for the Latin authors, too, will confer *some* benefit."† Thus he speaks of Menander as the model in comedy, the same as he does of Homer as the model in epic poetry. His meaning here is that while some other comic poets *may* be read, Menander *should* be read. Further on the Roman critic is still more emphatic. "Menander alone," he says, "in my judgment, would, if diligently read, suffice to generate *all those qualities* in the student of oratory for which I am an advocate; so exactly does he represent *all the phases of human life;* such is his fertility of invention and easy grace of expression; and so readily does he adapt himself to all circumstances, persons, and feelings."‡

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* "Dimidiatus Menander."

† De Menandro loquor; nec tamen excluserim alios. Nam Latini quoque auctores afferent utilitates aliquid.—*Inst. Orator*, lib. i., 8.

‡ Menander qui vel unus meo quidem judicio diligenter lectus, ad cuncta quæ præcipimus, effengenda sufficiat; ita omnem vitæ imaginem expressit; tanta in eo inveniendi copia et eloquendi facultas; ita est omnibus rebus, personis affectibus accommodatus," &c.—*Inst. Orator*, lib. x, c. 1, 69.

Neither Plutarch nor any other critic could confer higher praise than this; if any one could, Quintilian himself has done it further on, in the same book and chapter. And he has also given his opinion of Aristophanes, but a very different opinion from that which he has given of Menander. Indeed, it is evident that Quintilian considers the former so much beneath the latter as to render any comparison between them unsuitable—quite as much so as a comparison between Homer and Euripides.

But, few and small as are the fragments we have from Menander, they fully justify the highest praise bestowed upon him by Greek or Roman, ancient or modern. Before we give any specimen from him, however, we will make an observation or two on the change he effected in Greek comedy, and thus again he is brought into contact with Aristophanes, and the reader has an opportunity of recognising more particularly the justice of Plutarch's comparison. Aristophanes, be it remembered, belonged to the old school of comedy, whose strength and interest consisted chiefly in making personal attacks on prominent men of all grades; nor did it, by any means, allow an immunity to women. Neither age nor sex, wisdom nor patriotism, valour nor piety, afforded any protection from the lash of the satirist. The masses were delighted to see the noblest and most illustrious men thus exposed to derision in their presence. So popular had this species of satire become, that domestic privacy of the most sacred nature was constantly invaded, and innocent and honourable families were ruined and disgraced. Many attempts were made from time to time to put an end to so vicious a system; but as long as the people had the power they not only protected, but encouraged those who afforded them so much amusement at the expense of the rich and great.

The plays of Aristophanes do not illustrate all this. It seems that in general he spared at least the female members of private families, but that he did not spare the best and wisest men of his age is known to all who are acquainted with his works. There were much more licentious dramatists than he, however; men who, in order to make up for their lack of wit, humour, and education, indulged in the grossest abuse. Now if Menander had done nothing but to put an end to this disgraceful species of comedy, would he not have been entitled to the gratitude of the world? This will be the more readily admitted

if it be borne in mind that he was the inventor of what in our own time is called the regular drama; the inventor of that species of comedy of which Shakespeare and Molière have given us such noble specimens.

Menander was the first who combined the actions, the characters, and the manners without personality. In the old comedy, of which Aristophanes is undoubtedly the greatest exponent, there was no such thing as portraiture of character as understood at the present day; it is true that he portrayed individuals, but he did so in such a manner as to be seldom applicable even in part to any others. Even in this limited sense his descriptions were much more caricatures than portraits. In illustration of this we need only refer the reader to his coarse and exaggerated picture of Socrates and his school.*

In what is called the middle comedy—that which succeeded the old, when stringent laws were passed for the protection of society against licentious dramatists—rendering the satirist liable to punishment for assailing private character—there were slight but only episodic sketches of manners. But it remained for Menander to introduce incidents naturally arising from a cause, or combination of causes, which reveal themselves in the development of the action. We have no account of intrigues in comedy before the time of Menander; but all who have enjoyed the privilege of reading his works, agree that he excelled in the invention of plots which awakened the interest of the auditor or reader at the outset and enchained it to the close.

We have already remarked that none of the fragments of his which have come down to us give any idea of the structure of his dramas. The plan of only one—the "Apparition"*—is known to the moderns, and this we know only from a dry and brief analysis by Donatus. A beautiful woman had a daughter by a first love, which she had brought up with maternal tenderness in the house of her nearest neighbour. A breach made in secret in the partition wall allowed her to converse with her daughter. In order to deceive those who had access to the room on which the breach opened, she made a sacred place of it, a sort of domestic chapel. There, under pretext of offering sacrifices, she constantly enjoyed the society of her daughter. But a young man happening to enter her chamber saw the beauti-

* See his Clouds (*Νεφέλαι*).

ful apparition. He is struck with a religious dread as at the aspect of a vision introduced to profane eyes; but when he perceived that the young woman was but a a mortal he became desperately enamoured of her; and he soon succeeded in inspiring her with a similar passion, the result of which was that they were happily married. It is easy to understand that a genius, such as all regarded Menander, could construct an admirable drama with such materials; and there is little doubt that he did so.

But no fact that relates to him is more remarkable than the character of the fragments of his works that have reached us. None would have supposed that any of them formed a part of a comedy, in the modern sense of the term; they are rather such as might be supposed to have belonged to a grave and startling poem like the Divine Comedy of Dante. But it will be remembered that some of the finest and most philosophical thoughts of Shakespeare—those which show the deepest insight into nature and are most instructive—are found in his comedies. And the same is true of the thoughts of Lope de Vega and of Calderon. This proves the justness of the contrast of Plutarch; it shows that there was nothing of the buffoon in Menander; and does it not also prove that constant smiles, or smirks, not to mention constant laughter, such as all seemed to expect in the old mode of comedy, and which are still expected at the lowest class of theatres—were not expected after the dramatic reformation already alluded to. It is certain that there were at least occasions when no one reasoned more gravely than Menander. The first specimen of his style which we present to our readers is a fragment from the Dyscolus, in which a young man gently reproves a churlish father. We subjoin Cumberland's translation, and give the original at the bottom of the page for the benefit of the classical student:

"Weak is the vanity that boasts of riches,
For they are fleeting things. Were they not such,
Could they be yours to all succeeding time,
'Twere wise to let none share in the possession;
But if whate'er you have is held of fortune,
And not of right inherent, why, my father,
Why with such niggard jealousy engross
What the next hour may ravish from your grasp,
And cast into some worthless favourite's lap?
Snatch thou the swift occasion while still yours:
Put this unstable boon to noble uses;
Foster the wants of men, impart your wealth,

And purchase friends; 'twill be some lasting tie,
*And when misfortune comes, your best resource."**

There is nothing impertinent in this advice; nothing disrespectful to old age; nothing arrogant. It rather shows that the young men of Menander's time were capable of reasoning very differently from the young men of other ages—not excepting, perhaps, our own. The reader will remember what has been said of the alleged Epicureanism of Menander; how much he was disposed to gratify his sensual desires—in short, how much he indulged in all sensual pleasures, and how he gave himself no trouble about graver things. But there is nothing in any passage of his which has come down to us that affords the slightest evidence of his being a person of any such disposition. If he sometimes indulged in sensual pleasures—which it is needless to deny—he did not reflect the less profoundly on life on this account, or the less more clearly perceive how little of real happiness it affords even in the most favourable circumstances. The following passage, also translated by Cumberland, will sufficiently illustrate this:

"Suppose some God should say, 'Die when thou wilt,
Mortal, expect another life on earth;
And for that life make choice of all creation.
What wilt thou be, dog, sheep, goat, man, or horse?
For live again thou must: it is thy fate.
Choose only in what form; then thou art free.'
So help me, Crato, I would freely answer,
Let me be all things, anything but man.
We only of all creatures feel affliction.
The generous horse is valued for his worth,
And dog by merit is preferred to dog.
The warrior cock is pampered for his courage,
And awes the baser brood. But what is man?

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* Περὶ χρημάτων λαλεῖς, ἀβεβαίου πράγματος.
εἰ μὲν γὰρ οἶσθα ταῦτα παραμενοῦντά σοι
ἅπαντα τὸν χρόνον, φύλαττε, μηδενὶ
ἄλλῳ μεταδιδοὺς, αὐτος ὢν δὲ κύριος.
εἰ μὴ δὲ σαυτοῦ, της τύχης δὲ πάντ' ἔχεις,
τί ἂν φθονοίης, ὦ πάτερ, τοῦτων τινί;
αὐτὴ γὰρ ἄλλῳ τυχὸν ἀναξίῳ τινι
παρελοιένη σου πάντα προσφήσει πάλιν.
διόπερ ἐγὼ σέ φημι δεῖν, ὅσον χρόνον
εἰ κύριος, χρῆσθαί σε γενναίως, πάτερ,
αὐτόν, ἐπικουρεῖν πᾶσιν, εὐπόρους ποιεῖν
οὓς ἂν δύνῃ πλείστους διὰ σαυτοῦ· τοῦτο γὰρ
ἀθανατόν ἐστι, κἂν ποτε πταίσας τύχῃς,
ἐκεῖθεν ἔσται ταὐτὸ τοῦτο σοι πάλιν·
πολλῷ δὲ κρεῖττόν ἐστιν ἐμφανὴς φίλος
ἢ πλοῦτος ἀφανὴς, ὃν σὺ κατορύξας ἔχεις.

Truth, virtue, valour, how do they avail him?
Of this world's good the first and greatest share
Is flattery's prize; the informer takes the next;
And barefaced knavery garbles what is left.
I'd rather be an ass than what I am,
And see these villains lord it o'er their betters."*

This is a gloomy picture; but it can hardly be called misanthrophy since it is not man it speaks against but his fate. One may love his neighbour nothing the less for believing that himself and his neighbours are in such a sad condition that the fate of the lower animals which surround them is much better. It will be admitted that those who live a life of pleasure are not likely to wish for death. It is but rarely that the thoughtless and the gay are tired of life; it is this class who prize it most highly and cling most closely to it. But in several of the fragments of Menander we have the sentiment that they are most fortunate who die early. Need we say there is nothing contrary to religion in this? Are not the most pious Christian women consoled on the loss of their first-born by the adage, for such it has become throughout the civilized world:

"He dies the earliest whom the gods love best.."†

It might be denied, for the reasons already given, that Menander is the author of this (although its genuineness is attested by the most learned and impartial critics), were it not beyond doubt that we are indebted to him for several

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* Εἴ τις προσελθών μοι θεῶν λέγοι, "Κράτων
ἐπὰν ἀποθάνῃς, αὖθις ἐξ ἀρχῆς ἔσει·
ἔσει δ' ὅ τι ἂν βούλῃ, κύων, πρόβατον, τράγος,
ἄνθρωπος, ἵππος· δὶς βιῶναι γὰρ σε δεῖ·
εἱμαρμένον τοῦτ' ἐστὶν, ὅ τι βούλει δ' ἑλοῦ."
ἅπαντα μᾶλλον, εὐθὺς εἰπεῖν ἂν δοκῶ,
ποίει με πλὴν ἄνθρωπον· ἀδίκως εὐτυχεῖ
κακῶς τε πράττει τοῦτο τὸ ζῷον μόνον.
ὁ κράτιστος ἵππος ἐπιμελεστέραν ἔχει
ἑτέρου θεραπείαν· ἀγαθὸς ἂν γένῃ κύων
ἐντιμότερος εἰ τοῦ κακοῦ κυνὸς πολύ·
ἀλεκτρυὼν γενναῖος ἐν ἑτέρᾳ τροφῇ
ἐστιν, ὁ δ' ἀγεννὴς καὶ δέδιε τὸν κρείττονα.
ἄνθρωπος ἂν ᾖ χρηστὸς, εὐγενὴς, σφόδρα,
γενναῖος, οὐδὲν ὄφελος ἐν τῷ νῦν γένει·
πράττει δ' ὁ κόλαξ ἄριστα πάντων, δεύτερα
ὁ συκοφάντης, ὁ κακοήθης τρίτα λέγει.
δυσὶν γενέσθαι κρεῖττον ἢ τοὺς χείρονας
ὁρᾶν ἑαυτοῦ ζῶντας ἐπιφανέστερον.
Theophoroumeni—Meineke, p. 910.

† ὃν γὰρ Θεοὶ φίλοῦσιν, ἀποθνήσκει νέος. *Meineke*, 425.

fragments imbued with the same spirit. This is true, for example, of the noble passage from which the following has been translated, and of which it is a very inadequate version:

"The lot of all most fortunate is his,
Who having stayed just long enough on earth
To feast his sight with this fair face of nature,
Sun, sea, and clouds, and heaven's bright starry fires,
Drops without pain into an early grave.
For what is life, the longest life of man,
But the same scene repeated o'er and o'er?
A few more lingering days to be consumed
In throngs and crowds, with sharpers, knaves, and thieves;
From such the speediest riddance is the best."[o]

Some of the most striking beauties of the original are omitted here, because it is very difficult, if not impossible, to reproduce them in our language, or in any modern dialect, except perhaps, the Italian. Menander beautifully compares life in turn to the games and fairs of antiquity, and to a sojourn in a foreign country. Passing over these for the reason mentioned, Cumberland introduces the "sharpers, knaves, and thieves" too abruptly. But there is yet another fragment which contributes to prove that Menander was a philosopher as well as poet, but not an Epicurean. There is no finer specimen of pure Attic Greek extant at the present day—no passage in any language more replete with startling thought—than the following:

Ὅταν εἰδέναι θέλῃς σεαυτὸν ὅστις εἶ,
ἐμβλεψον εἰς τὰ μνήμαθ', ὡς ὁδοιπορεῖς.
ἐνταῦθ' ἔνεστ' ὀστᾶ τε καὶ κούφη κόνις
ἀνδρῶν βασιλέων, καὶ τυράννων καὶ σοφῶν,

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[o] τοῦτον εὐτυχέστατον λέγω
ὅστις θεωρήσας ἀλυπῶς, Παρμένων,
τὰ σεμνὰ ταῦτ', ἀπῆλθεν, ὅθεν ἦλθεν, ταχύ,
τὸν ἥλιον τὸν κοινόν, ἀστρ', ὕδωρ, νέφη,
πῦρ· ταῦτα κἂν ἑκατὸν ἔτη βιῶς ἀεὶ
ὄψει παρόντα, κἂν ἐνιαυτοὺς σφόδρ' ὀλίγους,
σεμνότερα τούτων ἕτερα δ' οὐκ ὄψει ποτε.
Πανήγυριν νόμισόν τιν' εἶναι τὸν χρόνον
ὃν φημι, τοῦτον, ἢ 'πιδημίαν, ἐν ᾧ
ὄχλος, ἀγορά, κλέπται, κυβεῖαι, διατριβαί·
ἂν πρῶτον ἀπίῃς καταλύσεις, βελτίονα
ἐφόδι' ἔχων ἀπῆλθες, ἐχθρὸς οὐδενί·
ὁ προσδιατρίβων δ' ἐκοπίασεν ἀπολέσας,
κακῶς τε γηρῶν ἐνδεὴς του γίγνεται,
βεμβόμενος ἐχθροὺς ηὗρ' ἐπεβουλεύθη ποθέν,
οὐκ εὐθανάτως ἀπῆλθεν ἐλθὼν εἰς φρόνον·

The Supposititious—Ὑποβολιμαῖος.

καὶ μέγα φρονούντων ἐπὶ γένει καὶ χρήμασιν,
αὐτῶν τε δόξῃ, κἀπὶ κάλλει σωμάτων.
ἀλλ' οὐδὲν αὐτῶν τῶνδ' ἐπήρκεσεν χρόνος.
κοινὸν τὸν ᾅδην ἔσχον οἱ πάντες βροτοί
πρὸς ταῦθ' ὁρῶν· γίνωσκε σαυτὸν ὅστις εἶ.*

We have a large number of single lines by Menander which have been collected by Meineke, Grotius, Le Clerc, and others, from the various Greek and Latin authors who quoted them from his works. Many of these have become proverbs in all nations; and not a few of them have been placed to the credit of the most pious of the Fathers of the Church. Some of the following combine both characteristics: —"He who loves himself too much is loved by none.—It is not base to die, but to die basely.—Being mortal, cherish not immortal hatred.—The all-seeing eye of Jove is over all.—No one loves any one better than himself.—Teach youth, for man you'll find unteachable.—The conscience is the god within us all.—On water write the oaths of wicked men.—No noble man can be ignobly born.—Reverence, seek not to comprehend the godhead.—All hew their faggots from the fallen oak.—Save man from ruin, he's your foe forever.—In every man there dwells a god, his reason."

The reader is now familiar with the principal fragments of Menander's works which have reached us. How many of the great thinkers of the world could have left such fragments? May it not be questioned whether there is one in existence at the present day—nay, who has existed for the last two centuries—or since Shakespeare's time, who could? All admit, as we have seen, that the Latin translations of Menander do him no justice; all the Roman critics acknowledge that their countrymen were utterly incapable of transfusing his beauties into Latin. Yet there is not one Latin drama, known to be a translation from Menander, which does not possess merits of a high order. Take the Andria (Ἀνδρία) of Terence, for example, and what noble thoughts, what an enlightened philosophy do we find in every act—nay, in almost every scene? For an illustration of this fact, we need not go beyond the first act. Pamphilus is in love with Glycerium. Simo, his father, wishes secretly to break off the match, although he has given his consent to it.

* "If you would know of what rude stuff you're made,
Go to the tombs of the illustrious dead;
There rest the bones of kings, there tyrants rot;
There sleep the rich, the noble, and the wise:
There pride, ambition, beauty's fairest forms,
All dust alike, compound one common mass.
Reflect on them, and in them see yourself."

Mysis, the attendant of Glycerium, comes to Pamphilus, in order to learn the worst. From the dialogue which ensues between them we extract a fragment:

"*Mys.* Alas, I fear
Where this uncertainty will end. 'Twere best
He should confer with her; or I at least
Speak touching her to him. For while the mind
Hangs in suspense, a trifle turns the scale.
Pam. Who's there? What, Mysis! save you!
Mys. (*coming forward.*) Save you! sir.
Pam. How does she?
Mys. How! oppressed with wretchedness;
To-day supremely wretched, as to-day
Was formerly appointed for your wedding.
And then she fears lest you desert her.
Pam. I!
Desert her? Can I think on't? or deceive
A wretched maid, who trusted to my care
Her life and honor! Her, whom I have held
Near to my heart, and cherished as my wife?
O leave her modest and well-nurtur'd mind
Through want to be corrupted? Never, never.
Mys. No doubt, did it depend on you alone;
But if constrain'd—
Pam. Do you think me so vile?
Or so ungrateful, so inhuman, savage,
That nor long intercourse, nor love, nor shame,
Can make me keep my faith?
Mys. I only know
That she deserves you should remember her.
Pam. I should remember her! Oh, Mysis, Mysis!
The words of Chrysis touching my Glycerium
Are written in my heart. On her death-bed
She called me. I approached her. You retir'd.
We were alone; and Chrysis thus began:
'My Pamphilus, you see the youth and beauty
Of this unhappy maid: and well you know
These are but feeble guardians to preserve
Her fortune or her fame. By this right hand
I do beseech you, by your better angel,
By your tried faith, by her forlorn condition,
I do conjure you, put her not away,
Nor leave her to distress. If I have ever,
As my own brother lov'd you; or if she
Has ever held you dear 'bove all the world,
And ever shown obedience to your will—
I do bequeath you to her as a husband,
Friend, guardian, father: All our little wealth
To you I leave, and trust it to your care.'—
She join'd our hands, and died.—I did receive her,
And once receiv'd will keep her."*

All will admit the beauty, especially of the closing passage; but the English version is greatly inferior to the Latin,

* Andria Act. I., S. 5.

not to mention the original Greek. In order that the reader who is acquainted with Terence may judge for himself, we transcribe the reply of Pamphilus to Mysis :

" *Pam.* Memor essem? o Mysis, Mysis, etiam nunc mihi
Scripta illa dicta sunt in animo Chrysidis
De Glycerio. Jam ferme moriens me vocat:
Accessi: vos semotæ; nos soli: incipit,
Mi Pamphile, hujus formam atque ætatem vides;
Nec clam te est, quam illi nunc utræque inutiles,
Et ad pudicitiam, et ad rem tutandam sient.
Quod ego te per hanc dextram oro, et ingenium tuum,
Per tuam fidem, perque hujus solitudinem
Te obtestor, ne abs te hanc segreges, neu deseras:
Si te in germani fratris dilexi loco,
Sive te hæc solum semper fecit maximi,
Seu tibi morigera fuit in rebus omnibus.
Te isti virum do, amicum, tutorem, patrem.
Bona nostra hæc tibi permitto, et tuæ mando fidei.
Hanc mihi in manum dat: mors continuo ipsam occupat.
Accepi: acceptam servabo."

This reminds us of the assertion of Ovid that all the comedies of Menander were founded on love, and it may seem to afford some foundation for the charge made by some of those who pretended to rival Menander that, whatever the women did, he was their defender. But there is abundant evidence in Terence that he was as discriminating and just in his portraitures of women, as he was in those of men. No doubt he admired and reverenced the beautiful and good, but he was not the less willing, on this account, to rebuke those of a different character. Nay, there is no writer who has spoken more boldly of the whole sex, as may be seen from the following passage, translated from Terence's version of a certain scene in one of Menander's plays :

" Oh heaven and earth, what animals are women!
What a conspiracy between them all
To do or not, to hate or love alike!
Not one but has the sex so strong within her,
She differs nothing from the rest. Step-mothers
All hate their step-daughters: and every wife
Studies alike to contradict her husband,
The same perverseness running through them all.
Each seems train'd up in the same school of mischief:
And of that school, if any such there be,
My wife, I think, is schoolmistress."*—*Hecyra*, Act II., S. 1.

* Pro Deum atque hominum fidem! quod hoc genus est, quæ hæc est conjuratio?
Ut omnes mulieres eadem æque studeant, nolintque omnia?
Neque declinatam quicquam ab aliarum ingenio ullam reperias?
Itaque adeo uno animo omnes socrus oderunt nurus:
Niris esse advorsas seque studium est, similis pertinacia est.
In eodemque omnes mihi videntur ludo doctæ ad malitiam:
Ei ludo, si ullus est, magistram hanc esse satis certo scio.

We think none have accompanied us thus far who do not regard it as a cause of deep regret that, with the exception of a few fragments, the works of Menander have perished. How they have been destroyed can only be conjectured. Some obscure writers allege that the Greek priests prevailed on the Byzantine emperors to order the poems of Menander, Philemon, Sappho, Alcæus, and several other poets, to be burned. But there is no foundation for any such statement; no historian or critic worthy of the name gives it any countenance. The only authority that can be adduced in support of it is Alcyonius de Exilio, a printer of the sixteenth century, and he gives the story as a tradition. If the Greek priests destroyed the works of all these poets because they were immoral, or irreligious, or both, why did they not also destroy the works of Pindar, Anacreon, Horace, and Plautus? Why did they allow the translations of Terence to escape? Why did they not burn, or cause to be burned, Lucretius' *De Rerum Natura*, a work which is not only antichristian, but atheistical?—which adduces the most elaborate arguments ever used in poetry that there is no God—that all things have come into existence by chance?

The tradition that Menander himself had his works destroyed is much more probable. That he should have done so is quite in accordance with his disposition and character, even as indicated by the fragments quoted above. More than once we have reminded our readers that in general it is not those who have most genius, but those that have least, or none at all, that are most anxious to have their works endure. Many a poet whose very name is unknown, has devoted years of anxious care to the dissemination of his fame, while authors like Virgil have requested, at their dying hour, that their noblest works should be committed to the flames. It is true that some of those who allege that Menander destroyed his own works, allege also that he committed suicide. But need we say that if a great poet wishes to destroy his poems, it does follow that he wishes also to destroy himself. The only foundation for any such suspicion against Menander is one line in Ovid, and this does not allege that he drowned himself, but that he perished while bathing or swimming:

"Comicus ut mediis periit dum natat in undis."*

The probability is that he died a natural death at

* *Trist.*, 591.

Piræus, at about the age of fifty; since neither Apollodorus, Eusebius, nor Aulus Gellius, each of whom records his death, makes any allusion to his having committed suicide by drowning, or any other means. But, however himself or his works perished, certain it is that a more brilliant, or more highly cultivated genius, has never existed in any age than Menander.

ART. II.—1. *Lettres physiologiques et moral sur le magnétisme animal.* Par DOCTEUR DUPAU. Paris.

2. *A New and Complete Library of Mesmerism and Psychology.* New York.

3. *Rapports et discussions sur le magnétisme animal.* Par M. FOSSAC. Lyons.

4. *Histoire critique du magnétisme animal.* Par M. DELEUZE. Paris.

EVERY person has some idea of what is meant by animal magnetism, but perhaps few have a correct idea of what it is. It has been before both the learned and the unlearned world for the last ninety years, and has excited much interest and investigation. Yet, hitherto, those who have examined it come to very opposite conclusions; some looking upon it as being a mere system of juggling, if not of real deviltry, while others regard it as a heaven-born discovery, a veritable godsend.

The limits we have proposed to ourselves will not permit our entering upon a critical review of the several works at the head of this paper. We believe the space and time at our disposal will be much more profitably employed in examining whether animal magnetism itself has a real existence, and, if so, what its nature, tendency, and effects are; in other words, we purpose examining it in the light of Physiology, Philosophy, and Morality.

Since animal magnetism, or mesmerism, was first ushered into notice, there has existed throughout the civilized world, and more particularly in France and Germany, a certain class of savants who recognize and

admit in the human species an extraordinary influence, which is outside the sphere of all known physical and physiological laws. This abnormal influence which is exercised on certain persons, and in particular conditions and circumstances, is attributed by them to an animal fluid imponderable, but transmissible, from one body to another, and made active by means of divers processess, such as passes, touches, frictions, gestures, words, and even by a firm will.

This supposed animal fluid, under the empire of the human will, produces, it is asserted, in delicate, nervous, impressible, feeble, hysterical persons, in short, in persons who unite sensitive, affective mobility to great nervous susceptibility; in such persons this animal fluid produces very varied effects or phenomena, and nearly in the following order, to wit: gaping, yawning, heaviness of the head, spasms, twitches, transient convulsive movements resembling electric shocks, torpor, drowsiness, complete suspension of the functions of the senses, and, lastly, somnambulism. In this state of artificial somnambulism it is said the following phenomena become sometimes devoloped, namely: new faculties under the name of clairvoyance, lucidity, intuition, prevision, retrovision, insight into space and matter, divination, intuitive knowledge or sight of the most intimate thoughts of absent persons, of the bodies of diseased persons; determination of the nature, the seat, and the treatment of divers diseases by persons who have made no studies in medicine, or in the inmost peculiarities of the human organization; transportation of the senses, such as sight without the aid of the eyes or of light; by the forehead, the occiput, the epigastrium, the tips of the fingers, &c.; paralysis is produced, or restitution of movement, or of the sensibility by the will, or by a mental order, communication of thoughts without any kind of signs, and, lastly, absolute forgetfulness on awaking of all that passed during the magnetic sleep.

Such are the extraordinary phenomena, the astounding wonders, the unheard of prodigies, with innumerable varied shades, that constitute what is in our days called animal magnetism.

It need not be said that a question which has led to such results, whether real or imaginary, is an important one, and one that ought to be examined and weighed without prejudice or partiality, and with the sole design of doing it full justice. It is in this spirit that we have, ourselves, investi-

gated it, and in order to guard as much as possible against error of any kind, we have made it a point to study it especially as it was exhibited in the metropolis of France, and when its claims, its successes, or its failures, would have been, and were, investigated, not alone by individual partisans and opponents, but by grave, scientific, and learned bodies, and where, moreover, it ran no risk of being persecuted in the interests of orthodoxy.

Again, we considered that, in order to form a just opinion in regard to any system or doctrine, it was best to study it in its incipiency and infancy. Now, though Germany may justly claim the origin of animal magnetism, it must be conceded that Paris was its cradle and nursery, and, consequently, it is in the latter place that we can first study its spirit, its moral or immoral tendency, and its scientific value. But our picture of it will, with slight variations, suit all places and times.

Mesmer, a German physician, is generally regarded as the discoverer of animal magnetism. In 1799, he published a "Memoir on the Discovery of Animal Magnetism," in which we find the following passage:

"It is a fluid that is diffused universally; it is the medium of a mutual influence between the celestial bodies, the earth, and animated bodies. The action and virtue of animal magnetism may be communicated from a body to other bodies animated or inanimated. This action takes place at a great distance, without the aid of any intermediate body; it is augmented and reflected by mirors, and communicated, propagated, and increased by sound. Although this fluid is universal, all animated bodies are not susceptible of its influence. There are even some bodies, in very small numbers it is true, that possess a property so opposite that their mere presence destroys the effects of this fluid in other bodies. * * * * By means of magnetism the physician knows the state of health of each individual and judges with certainty the origin, the nature, and the progress of the most complicated diseases; he prevents their increase, and succeeds in curing them without ever exposing the patient to dangerous proceedings or to disagreeable consequences, whatever may be the age, the temperament, and the sex."

We will first mention the plan resorted to by Mesmer himself, as we have it from the pen of Dr. Bouillaud, Professor in the Faculty of Medicine, Paris: "A small wooden vessel or tub was elevated in the middle of a large hall; this tub was covered with a lid, which was perforated with a certain number of holes, through which issued iron rods that were branched, bent, and moveable. The patients were ranged around this tub; each one had his iron branch, which, by means of the elbow it presented, could be directly applied to the diseased or affected parts of the body. A cord put round

their bodies united them to each other; sometimes a second chain was formed by causing the patients to communicate with each other by holding each other by the hands. A piano-forte was placed in a corner of the hall and different airs were played on it, with varied movements; and sometimes even vocal music was added to it. All those who magnetized had in the hand an iron rod or wand from ten to twelve inches in length, and which was considered as the conductor of the magnetic fluid. It also possessed the power, it was said, of concentrating the magnetism in its point, and rendering the emanations more powerful. Sound, in the mesmeric system, was also a conductor of magnetism, and in order to communicate the fluid to the piano, it sufficed to bring the rod near it. The cord with which the patients were surrounded was designed, as well as the chain of hands, to increase the intensity of the magnetization. The interior of the tub was what may be called the focus of the magnetic fluid, and the matters it enclosed contained nothing that was electric."

The mesmerists magnetized also, directly, by means of a finger, and of the iron rod moved to and fro before the faces of the patients, above, or behind their heads, or on the affected parts, always observing the direction of the poles. They were further acted upon by looking at them fixedly, and especially in pressing with the hands the several regions of the epigastrium, manifestations that were sometimes continued for whole hours.

It was not human beings alone that were submitted to the magnetic power; trees, also, were magnetized. They were, so to say, enchained. There is nothing, even to the most inanimate body, such as a wine-glass, a bottle, a cup, &c., that was not capable of acquiring the magnetic virtue.

In our days the pompous proceedings of Mesmer have been generally laid aside. The person who is to be magnetized is seated in an arm-chair, on a sofa, or in a common chair. Sitting on a seat a little more elevated, facing her, and about a foot distant from her, the magnetizer appears to pause and reflect for a few moments, during which time he takes the hands of the lady in such a manner that the inside of her thumbs touches the inside of the thumbs of the operator, who fixes his eyes on her, and remains in that position until he feels that there is an equal degree of heat established between the thumbs put in contact. Then he withdraws his hands and, turning them outwards, lays them on her

shoulders, when he lets them remain about a minute, and then draws them slowly and gently along the arms to the extremities of the fingers. This movement, which is called a *pass*, is repeated five or six times. Afterwards the magnetizer places his hands above the head, lets them remain there a moment, and then brings them down before the face at a distance of an inch or two, as far as the epigastrium or pit of the stomach, when he stops again, resting his thumbs; from this point he then brings them down slowly along the body to the feet. These passes having been sufficiently repeated, the magnetizer terminates the operation by prolonging or lengthening the passes beyond the extremities of the hands and feet, and briskly skaking his fingers each time. Finally, he makes transverse passes before the face and the breast at the distance of three or four inches by presenting the palms of the hands brought together, and then separating them briskly.

Sometimes the magnetizer places the fingers of each hand at three or four inches distance from the head and from the stomach, fixes them in that position during one or two minutes, then separating and uniting them alternately with more or less promptness, he seems to imitate the very natural movements that are executed when one wishes to get rid of a liquid that has wetted the ends of his fingers.*

M. Deleuze, one of the most fervent apostles of mesmerism, has pointed out in his writings the conditions necessary for success in magnetic operations. We here present a summary of them: "It is necessary that all persons who shall assist at these operations shall observe the most religious silence, and that the expression of their physiognomies shall neither inspire nor thwart the magnetizer, nor excite doubt in the person that is magnetized. Certain magnetizers require another condition that is very severe, and which is not as easy to be found as the preceding among persons who are truly enlightened; it is a sincere faith in magnetism; but, according to other magnetizers, this condition is not absolutely necessary."

M. Rostan, another ardent propagandist of magnetism, says: "The processes of animal magnetism have been described in several ways; by each magnetizer in his peculiar manner. It suffices for some to impose the hand on the head of the person to be magnetized, immediately, or at a short dis-

* See the "Rapport de M. Husson à l'Academie Royale de Médecine."

tance ; others place the hand on the epigastrium, and some again on the shoulders. Ordinarily, after some sittings, it is no longer necessary to impose the hands at all ; it suffices to say to the person who is being magnetized : Go to sleep, I wish you to do so, and immediately she falls asleep without the power of resisting the order. Sometimes, even, it is necessary to have only the will without manifesting it. It has often happened to me to desire that some person should fall asleep ; immediately twitches, yawnings, and other precursory symptoms of sleep became manifest : '*What are you going to do to me ? I beg you not to put me to sleep ; you are making me sleepy ; I don't want to be put to sleep.*' But one arrives at such a great influence only gradually."*

Three learned societies in France took up successively the question of animal magnetism : First, the old Academy of Sciences, in March, 1784 ; secondly, the old Royal Society of Medicine, first in August, 1784, and then in the *séance* of the 22d of October of the same year, when Thouret was charged with the task of rendering an account of the different letters and memoirs the society had received from its associates and correspondents on the subject ; and, thirdly, the Royal Academy of Medicine, in February, 1826.

It was by royal authority that the initiative was taken in 1784, the king having at first nominated only physicians of the faculty of Paris, to wit : Borie, Sallin, Darcet, and Guillotin, to give him an account of the magnetism practised by M. Deslon ; but, at the request of these four academicians, there were added to their number five members of the Royal Academy of Sciences, namely, Franklin, Leroy, Bailly, De Bory, and Lavoisier. De Bory having died when the commissioners commenced their labours, Mejeault, Doctor of the faculty, was designated to fill his place.

The magnetizer, Deslon, a disciple of Mesmer, engaged to the commissioners : First, to prove the existence of animal magnetism ; secondly, to communicate to them his knowledge of the discovery ; and, thirdly, to prove its utility in the cure of diseases.

Nothing could have been more fair than to have proved to the commissioners the asserted existence of animal magnitism, and of the efficacy of the several manœuvres said to be practical. Yet, in both these respects, Deslon unfortu-

* *Dictionnaire de Médecine.* Art. " Magnétisme animale."

nately failed; but it was necessary for the commission to form an estimate of the effects of mesmerism. To arrive at this, the commissioners of the Academy of Sciences resolved at first to magnetize themselves, with the express condition that no stranger should be admitted to the place of the sittings, in order to be able to discuss freely among themselves their observations, and to be in all cases the only, or at least the principal judges, of what they would have observed. The experiments were made under the conditions just referred to, and it remains well proved that none of the commissioners felt, or in the least experienced anything that was of a nature to be attributed to the action of animal magnetism.

Seven patients were afterwards assembled in the dwelling of Dr. Franklin, at Passy, and magnetized in the presence of all the commissioners. These patients belonged to the lower orders of society; others were chosen from among those of the most elevated social positions; then some children were magnetized, in order to vary as much as possible the individual conditions. Now, in all these experiments, the commissioners became convinced that the imagination did everything, and that magnetism was a nonentity. "The touches, the imagination, imitation—such are," continues the reporter, "the true causes of the effects attributed to this new agent known by the name of animal magnetism, which is said to be circulated in bodies, and to be communicated from one person to another."

Final conclusion.—"The magnetic fluid does not exist; animal magnetism is a nullity, and the means employed to put it in action are dangerous."

(Signed)

Benjamin Franklin.	Leroy.	Darcet.	Guillotin.
Mejeault.	Bailly.	De Bory.	Lavoisier.

Paris, the 18th of August, 1784.

The Royal Society of Medicine, in the same year, came to the conclusion that the theory of animal magnetism is a system totally devoid of proof, that the proceedings employed to put it in action may be dangerous, and that the means resorted to in the treatment of diseases may produce many grave, convulsive, and spasmodic accidents. In 1825, and in 1837, the Royal Academy charged commissions to examine anew the question of animal magnetism, and the conclusion in 1837 was that the facts are far from being favourable to

the doctrine of magnetism, and that they possess nothing in common with physiology or with therapeutics, or the science and art of healing.

We will terminate these historical notices with some remarks on a couple of famous somnambulists who were noticed by the Parisian medical journals:

"The magnetic prodigy so long announced, and so impatiently waited for to settle the opinions of the learned world, has been appreciated and reduced to its just value. Mdlle. Pigeaire has arrived in Paris. She has had the honour of occupying the leisure time of the Academy and of the saloons; but she has not had that of bearing off the palm, or that which would have been still better, Burdin's prize of three thousand francs.

"The commission, charged with examining the facts announced by the father of Mdlle. Pigeaire, have had a first interview with him to fix the conditions of the bandage that was to cover the eyes of the girl. There was great contestation about this delicate point; at length M. Pigeaire, having refused to submit to all the precautions required by the commission to prevent any kind of deceit, found himself outside the conditions of the programme of the Burdin prize.

"The commission afterwards assisted at the experiments of Madame Pigeaire on her daughter, in her own manner. The result, which may be expected in advance, was, that the young somnambulist could read with her eyes by the aid of some luminous rays that penetrated either from beneath or through the bandage; that is to say, that she has come, from long exercise and the force of habit, to read with very little light, the same as cats see in the dark. Messrs. Gerdy and Velpeau were convinced of the fact in examining the bandage that was placed over her eyes; they perceived in it very small holes, which permitted the passage of some rays of light. M. Velpeau could, even through the bandage, distinguish the ace of diamonds of a playing-card. Such is the power of magnetism! Such are the conclusions of the report of the commission—a warning to magnetizers."*

In 1841, another young somnambulist, named Mademoiselle Prudence, made some noise in Paris. She saw through a mask of potter's clay (*argile*), adjusted in the following manner: At first several scraps of black gummed taffety, destined to cover exactly the eyeballs, and to oppose the opening of the lids, were applied. This being done, the hollow of the orbits was filled with clay, or the earth used by sculptors for models; then this paste was extended on every side in such a manner as to cover the superior two-thirds of the face. This operation being terminated, a black ribbon was applied to the region of the eyes, in order to maintain in its place this kind of mask, which was covered over again, with the same object in view, with new layers of the paste. It was through this apparatus, composed of different opaque mediums, that the somnambulist saw, but only at the end of

* *Revue Medicale*, Août, 1838.

four or five minutes, and after many movements of the head, of the body, and of the arms.

Several physicians, who had been witnesses of this magnetic science, made some experiments with an apparatus entirely like that of the somnambulist, and the following were the results of these curious experiments: 1st. At the end of ten minutes a card moved in different directions before the face is named. The persons present notice that the borders of the apparatus are detached from the skin at some points; they are reapplied with the greatest care, and immediately after another card is recognized. The subject declares having seen from beneath. 2d. At the end of eight minutes a card is recognized. The apparatus is readjusted in all points where there may be the least solution of continuity; the subject recognizes the queen of spades, and reads the word Pallas printed on the side of the card. The persons present declare they have seen no trace of breach of continuity (degradation). Sight was received from the right side. 3d. A card is recognized at the end of twelve minutes. Careful adjustment of the apparatus is attended to. Vision continues to take place. The subject declares he sees from above. 4th and 5th. The same results, and with the same precautions. In these two experiments the card was seen from the side, once from the right side and once from the left. 6th. This time, at the termination of eight minutes, the subject named a card; afterwards declared to have seen it straight before him. After this declaration the apparatus was scrupulously examined, and it was impossible to make out the point that had given transmission to the luminous rays. The clay was applied with increased precaution to several parts of the mask and particularly towards the root of the nose, and still the vision continued to take place. 7th. The seventh and last experiment is the most important of all. One of us having the apparatus hermetically applied saw in the course of a few minutes; he named, so to say, the cards accordingly as they were presented. He read books as soon as they were opened, whatever may have been the size of the print. He read thus, almost off-hand, the title of the *Petit Carême* of Massillon, and the table of the Tragedies of Seneca. During ten minutes two persons present searched in vain in the mask the point which permitted the passage of light, and used every means to remedy successfully above, below, at the sides—in a word, at every

point where there might be the least appearance of derangement, without our being able to prevent the exercise of vision. The subject at length declared he saw from a point in the middle of the mask, towards the left.

The conclusions that may justly be drawn from the preceding experiments are: 1st. Vision may be exercised by non-magnetized and wide-awake subjects through a plaster of taffeties, a mask of potter's clay, and a bandage superimposed, however exact the application may appear outwardly. 2d. Vision may take place in all directions, from above, from below, sideways, or before the face, without the observers in any of these cases being able to discover the point at which it takes place. 3d. To explain Mdlle. Prudence's exercise of vision through the mask it is not necessary to admit the intervention of a state abnormal, somnambulic, or any other than natural, the ordinary laws of physics and of physiology sufficing for an explanation.*

It now remains for us to state how vision may take place through these divers appliances, apparently so impervious to light. We would say then, if the reader has not already anticipated us, that vision took place through the imperceptible, small openings or holes that were formed in the potter's clay by the action of heat, and that the gummed taffeties became humid and detached by the effusion of tears and the movement of the eyelids. It may have been remarked that the subjects never saw immediately, and that it was only after a certain time that they could do so.

But there is a sure and infallible means of immediately preventing vision in these cases; it is to place a leaf of paper, sufficiently large and thick, before the object and at a certain distance from the eyes. It is perhaps the best and surest of all bandages.

It must be remembered that magnetic subjects are commonly chosen from the class of persons who are nervous, sickly, feeble of body, of mind, reason, and character; in a word, they are ordinarily women, hysterical, vaporous, impressible young girls, &c. It is not then astonishing that a man, endowed with a *physique* more or less imposing, with a keen and commanding look, armed besides with the most fascinating manners, with an expressive physiognomy, with a great power of mimicry, of mysterious and grave bearing and lan-

* See the *Gazette Medicale*, of 11th September, 1841.

guage, and with a composed and fascinating air—it is not astonishing, we say, that such a man, by the aid of such a magical exterior, should fascinate, subjugate, and captivate those delicate, feeble, timid, and credulous beings; stupify them, paralyze them, or throw them into those nervous crises, those spasms, those fidgets, those convulsions, or into a state of complete insensibility, or into a real and profound sleep—in a word, into a state of artificial or magnetic somnambulism.

Again, among some subjects, for instance, hysterical ladies, the able magnetizer will produce the same nervous phenomena by proceedings that are very different from these we have just referred to; an exterior less grave, a look less severe and more sympathetic, words more honeyed, some gestures, some magnetic touches adroitly applied; in sober earnest, there is scarcely a caprice or an anomaly of the nervous system that, in such subjects, may not be produced by a man of the physical and moral constitution required by the teachers of magnetism for the success of its proceedings. What still more marvellous effects must these not produce on subjects that are neuropathic, melancholic, hypochondriac—in a word, suffering every ailment, real or imaginary, that flesh is heir to? An able magnetizer, especially if he is a physician and an intelligent physiologist, knowing the immense power and extent of the nervous influence, will strike forcibly and pathetically the imagination of these diseased minds and sometimes obtain, it must be confessed, wonderful effects.

Further, it is impossible to describe the tone, the affective accents, the magical airs of the magnetizers, and especially of their sweet and engaging manners. We will quote from Dr. Dupau a synopsis of the language of one of these gentlemen: "Take courage, my child; do not trouble yourself in the least; you are soon going to feel the benign and sweet influence Heaven sends you; you are going to be immersed in an ocean of ideas, the delights of which will produce in you a salutary revolution. The most perfect health will be the happy result of the inexpressible raptures of your soul. Let your thoughts be solely occupied with the ineffable happiness you are about to enjoy. Good, very good, my dear friend; continue to elevate yourself interiorily to the great benefit of your cure. I promise it to you, and nothing can prevent it."* Judge, now, of the effect these emphatic and

* Lettres physiologiques et morale sur le magnétisme animale, par le Docteur Dupau.

pathetic discourses must produce on feeble and sick minds, on suffering, poor mortals, who believe everything and submit to everything in the hope of being relieved, if not cured. Volumes would be required to mention all the wonders, all the marvellous and sudden cures that have been effected by adroitly turning to account the almost illimitable power of the nervous system, or in practising what has justly been appropriately called *moral medicine.*

A young lady is suffering horribly from a nervous toothache, which no material means can calm ; she is magnetized, and suddenly the pain is put to flight by the magnetic passes. It is highly probable that a sudden and very lively impression, an unforseen event, the sight of the dentist's instruments, or any other object of terror, would have produced the same wonderful cure. This, then, is the effect of the nervous influence. Maternal instinct sometimes, also, inspires a kind of magnetism. A mothes caresses her suffering child ; she tenderly rubs the painful spot, blows her breath on it, and looks at it with tenderness ; she tells the child the pain is gone, and forthwith he becomes calm and falls asleep.

It is in the sympathies and antipathies of our nature that we find the source of the most extraordinary effects produced by the sight of an object on the nervous system. A man endowed with greater strength and more daring courage will often over-awe his adversary by a supercilious look and a menacing attitude ; ferocious animals strike with terror the prey which cannot escape them. The partridge and the quail can no longer fly—not at the sight of the hunter, howsoever great a magnetizer he may be—but at the sight of the hunting-dog. The hare cowers in his lair, and the toad, agitated with convulsive movements, comes, as if in spite of itself, to the jaws of the reptile that, with flaming eyes, waits to devour it. We are informed by Dr. Dupau that the toad itself, by its horrid looks and the disgust it creates, causes some persons to faint. Furthermore, have we not accounts of nervous and delicate females who have been sickened or even thrown into convulsions at the sight of a spider, a mouse, &c., or any other object of terror! Have these phenomena any other cause than the instantaneous and untoward impression produced in a lively imagination and a very irritable, nervous system ? Have these animals also a fluid which they emit or dart with a firm will into the persons they fascinate and frighten ?

Sudden terror of an appalling nature may instantane-

ously assist nervous affections produced by a kind of contagious imitation. At the hospital of Haarlem a little girl having been taken with convulsions, several others became equally afflicted; the celebrated Boarhaave then caused a chafing dish with red-hot irons to be brought in, and threatened to burn on the soles of the feet the next one that would have the convulsions; from that moment all were cured. Similar examples are not uncommon. The commissioners who were charged with the examination of magnetism, mention in their report that, at a ceremony of a first communion in the church of St. Roch, in Paris, a young girl having had convulsions, fifty to sixty others had similar convulsions in the course of half an hour.

They further mention, that the Marshal De Villars states in his memoirs his having seen in the Civennes a whole village in which all the women and girls, without exception, appeared to be possessed by the devil; they trembled and prophesied publicly in the streets.

Father Debreyne, a Trappist priest and a professor of medicine, mentions the following curious case: "About twenty years ago, a woman from the country, very simple, credulous, and superstitious (a magnetic subject), came to consult us; she believed and said she was possessed by the demon. We confined ourselves to prescribing a treatment that was purely hygienic and moral. After the consultation some of our students, who were well instructed and very cautious, but very droll, wishing to have a little amusement, charged themselves, unknown to me, with putting immediately into execution the moral point of the prescribed ordinance. The devil was to be chased away by striking powerfully and suddenly the morbid imagination of the monomaniac with a display calculated to excite terror. She was conducted in a mysterious manner to a dark chamber into which no light penetrated but merely what sufficed to see objects that were capable of producing in the mind of the patient an impression of surprise and dread, such as the appearance of spectres, bones, human skulls, &c. It was by the aid of this phantasmagoric scene, joined to the burlesque parody of ceremonies of exorcism (a thing we did not approve), and especially by administering to the patient copious aspersions of lustral water that they succeeded in curing her completely."

The expectation of very skilful and efficacious treatment may, and often does, strike the imagination of the patient,

and really produce in him sensible and material effects independently of any therapeutic or curative agent. A countryman went to consult a physician who gave him a written prescription for a purge, to be had at a druggist's shop. In giving him the prescription the physician said to him: "Take that and it will purge you." The patient following the prescription rather too much to the letter, swallowed the paper, and did not fail in being copiously purged. Was this paper magnetized? It was as much so as a non-magnetized glass that was presented to a woman, and we are credibly informed that she in touching it, believing it to be magnetized, entered into a crisis.*

But let us now listen to magnetizers themselves speaking about their art. "Faith," we are informed by M. Deleuze, "is necessary for the magnetized; yet absolute incredulity may repel the action of magnetism, retard it, or oppose its effects for a longer or shorter time. In fine, the three qualities which give energy to magnetism are *faith*, *hope*, and *charity*. Magnetizers are different from each other as regards strength and ascendancy. The robust maguetizer has more power than one of a feeble constitution, or an old man."†

The ascendancy, then, of the *physique*, or the superiority of strength, operates on the mind. Hence it becomes necessary, at last, to admit that many of the magnetic miracles, which we do not dispute being real, are wholly dependant on the nervous system, on that great enchantress, that adroit magician, who rules in her vast empire all the powers of the sensibility. The reader, no doubt, comprehends what we mean; it is the imagination, the buffoon of the mansion, as an ingenious author has called it. The phenomena of magnetism appertain then to the domain of physiology, and they have been known more or less at all times. It is a remarkable circumstance that magnetism produces no effect on confirmed maniacs, or on young infants, apparently because the influence of the imagination over them is slight.

"My theory is very simple," said a well know magnetizer to a very intelligent physician; "you are stronger than I am, and with a blow of your fist you could fell me to the ground. So, likewise, there are persons who are more powerful in mind, in imagination, and in intelligence than others.

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* See the details of this case in the *Précis de Physiologie humaine*, par P. J. Debreyne.

† Page 127 of tome 1.

If I wish to have the mastery over persons who are stronger than I am, in body as well as in mind, I cannot magnetize them unless these persons cede to me, and become subject to me, so to say, by confidence and faith. It is necessary that I should find my inferiors in mind, in character. Then, taking boldly the ascendancy over these persons who regard me as a person endowed with an energetic power, I strike their imagination; if the idea alone does not suffice, I employ gestures, mysterious appliances, a commanding tone, that masters them, that subdues these rebellious spirits; I command them, and under the empire of my will they fall asleep or they awake as I please. Influenced, then, by the high confidence with which my superiority inspires them, they find themselves relieved, and even cured. I obtain complete sway, especially over persons who have only imaginary diseases, hypochondriacs, hysterical persons, all those who are languishing, valitudinarian, or enervated; and in making a powerful impression on their *morale*, I reanimate the vital energy of their economy; I raise and exalt these weak minds just as we see disheartened soldiers become brave by the sole thought that they are sustained by a great armed force, or by the ability of their general."

Elsewhere, in another place, Dr. Virey adds: "But it will be said animal magnetism depends on a moral fluid; it is by that it exercises its influences." Why was not this explained sooner? Upon this point we are agreed, and to render more intelligible this whimsical term of moral fluid, we translate it by a term better known, namely, the imagination; then, far from denying its power, we concede to it even much more than the magnetizers believe they can obtain from it.

It is well known that magnetic influences, which will henceforth be better appreciated under the name of imagination, may extend to a greater or less distance, and even beyond the presence of the magnetizer; all that is needed for that is a firm faith, a grand principle which must never be lost sight of. We will present here some known facts about which the magnetizers will not be in haste to furnish their ordinary explanations: "A magnetized female (notice it is always women, people who are feeble and simple, or credulous, and children who hold the highest rank among magnetic subjects, and that for excellent reasons) entered into a crisis even behind a screen, or in another room, when she was magnetized with-

out her seeing the magnetizer, provided she knew or believed him to be present, a proof, it was exclaimed, of the marvellous power of magnetism. However, in place of the ordinary magnetizer, and without the patient in the least suspecting it, one of those incredulous experimenters, who used none of those processes so much recommended to produce the charm, came in his place. Nevertheless, the poor magnetized creature in the adjoining room uttered loud cries, groaned, and roared out as if her nerves had received the most terrible commotions. How many other persons have there not been magnetized at two or three leagues distance, and note well, at the particular hour agreed upon. The magnetizers take credit to themselves for this. Moreover there are sensitive subjects who believe themselves magnetized when they are not even thought of; it is sufficient that they believe they are operated upon, and that the magnetizer has a power worse than that of the demon."*

It cannot be too often repeated that the nervous power or influence is a lever of almost illimitable force, and one that is beyond the measure of the human mind "Of all the instruments we may employ to know the imperceptible agents of nature," says the celebrated Laplace, "the most sensible are the nerves, especially when particular causes exalt their sensibility. It is the phenomena produced by the susceptibility of the nervous system in some individuals, that have given origin to the different opinions on the existence of a new agent that has been called animal magnetism."†

We can afford space only to take a glance at some of the exaltations and aberrations, the plays and the caprices of the nervous system, or of the human sensibility. Sensitive exaltation is well known. In certain morbid states visual or optical sensibility becomes increased to the point that certain persons distinguish perfectly objects in the dark obscurity of night, and go about in the midst of the thickest darkness. Certain negroes pursue others in following them merely by the odour. Women have been mentioned who recognized the presence of certain persons, although they did not see them, and believed them absent. According to the report of Digby, as cited by Le Cat, a young lad raised by his parents in a forest where they retired to hide them-

* Virey, as quoted by Dr. Debreyne.
† Essai philosophique sur les probabilités.

selves from the depredations of war, and who there had lived only on roots, had acquired such delicacy in the faculty of smelling, that he could distinguish by it the approach of enemies, and apprise his parents of the matter. He was, however, made a prisoner, and his savage mode of life being changed, he lost a part of his great olfactory power. A young lady who became very sensitive in consequence of severe chagrins and different nervous affections came to have an exaltation of the sense of smelling that was altogether extraordinary. All kinds of odours were disagreeable to her, and particularly those from human emanations. She could not bear the odour of the bed-clothes when her bed was made by any other person than herself.

It is known that dogs recognize the traces of their masters, and that many animals follow their prey by the scent. But what is still more surprising, is to see dogs that have been transported some hundreds of miles by sea, or in shut-up carriages, return to the houses of their masters. So also pigeons, carried in sacks a great distance, have been known, when let loose, to have flown back home to their pigeon-houses. Did our limits permit us to pursue this matter in the domain of natural history, we should obtain very interesting results, calculated to throw much light on this subject.

So, both physiological and pathological laws prove that general and local sensibility may be increased or diminished, or at least suspended, and that it may be diffused or concentrated in certain points of the system, either interior or exterior, and present then the most singular and fantastic aberrations and anomalies.

Somnambulism, or sleep-walking, has been regarded as the most certain characteristic of the influence of magnetism. The sleep produced or occasioned by proceedings said to be *magnetic*, may be: First, purely physiological or natural; that is to say, the momentary or temporary suspension of the actions of the senses. Silence, a mysterious collectedness, monotonous gestures a long time and frequently repeated, and often joined to *ennui*, often end in putting certain persons to sleep naturally. Secondly, it may be artificial. The sleep which is produced by magnetic influence is not a true physiological sleep, natural and restorative; but it is an abnormal, unusual, morbid condition, that gives rise to certain *rapports*, or modes of communication calculated more or less to move, excite, or sometimes disorder the ner-

vous system of irritable and impressible persons. We may easily conceive the great perturbation that may, in this case, be produced by an imposing attitude or a mysterious, magical exterior, a grave and composed appearance, a fixed and commanding look—in a word, the *ensemble* of gestures, of touchings, and of words capable of seducing or fascinating an unsettled, feeble, or disordered imagination. Magnetic, or artificial somnambulism, is not fundamentally different from that which happens spontaneously to certain persons during natural or ordinary sleep. This latter somnambulism is a true nervous affection, or a kind of disease, such as magnetic somnambulism also is. It may be added that the sleep caused by these magnetic fascinations is a real coma, or like the sleep produced by opium; that is to say, a congestion of the brain which simulates natural sleep.

In the first sittings only insignificant effects are commonly obtained, such as heaviness of the head, yawnings, sleepiness, &c. The next day the repetition of the same acts at the same hour reproduces very easily the same series of effects and sensations, and at the end of some days the habit becomes established. The subject submitted to these magnetic processes may experience slight convulsions, sleeps more or less profoundly, and is with difficulty awakened by external excitation. This magnetic state is, like natural somnambulism, compatible with the exercise of the vocal organs, of movement, and of locomotion, and there is no real difference between these two kinds of somnambulism but what we may call the errors peculiar to the magnetic state. Here we have the totality of the phenomena which magnetic somnambulism ordinarily present, and it will be remarked that there is not a single one of them that can be contested. Yet it must not be forgotten that somnambulism may be simulated, as is admitted by all friends, as well as foes, of the system.

Now, what is meant by *lucid* somnambulism? By lucidity is understood a particular form or mode of somnambulism, whether natural or artificial, in which, by a concentration or exaltation of the intellectual faculties or of the instinctive aptitudes, the suspension of the external sensations is favoured. A man in this state does things of which he is absolutely incapable in the waking state, or in his normal and physiological condition. Thus, persons in this condition resolve, as many persons know, problems the most difficult and insoluble in the waking state; they compose

pieces of poetry; they pronounce discourses that produce astonishment by the justness and elevation of the thoughts; they speak languages which they have forgotten, or the use of which they have for a long time discontinued.

When somnambulists do only common actions, such as walking, talking, labour at something, &c., that is, what they habitually do in the waking state, they are then in the state of ordinary somnambulism, which presents nothing remarkable but the suspension of the external senses, and the preservation of the powers of speech, movement, and locomotion. These two kinds of somnambulism, lucid or otherwise, are as we have already said, a veritable nervous affection, a species of cerebral disorder; and the proof that lucid somnambulism is the effect of a disordered condition or of a disease is, that it is equally observed in affections of the brain and in hysterical disorders, as is shown by the following facts: "The *valet de chambre* of a Spanish ambassador, a youth of only ordinary capacity, and who happened by chance to be present at some very important conversations, became by them neither more learned nor intellectual than he usually was; he became affected with a brain fever, and during his delirium he discussed with much sagacity the political interests of the several powers in such a manner, that the ambassador, who never regarded his domestic but as a devoted servant, came to hear his lessons on diplomacy, and determined to make him his secretary. But the affection of the brain passed off, and the patient in becoming cured lost all his brilliant qualities."*

According to Pomme, a hysterical girl, during her excesses, composed verses, spoke with eloquence, and exhibited great vivacity of mind; yet, at all other times, her intelligence was not above mediocrity.

It follows, from what has preceded, that all the astonishing and extraordinary phenomena of lucid phenomena, whether spontaneous or provoked, are purely natural, and are explained perfectly by the laws of physiology and of pathology.

It is admitted on all hands that it is but rarely lucid somnambulism is obtained, and that only among some persons whose nervous system, or a particular idiosyncrasy, favours this morbid predisposition; or among those who are already

* Lettres philosophiques et morales sur le magnetisme, par le Docteur Dupau.

more or less somnambulists, or who would by their organic predestination, become so naturally. There are many persons who present shades of somnambulism such as talking aloud in sleep, &c.

It is pretended that there exists between the magnetizer and the magnetized, or the somnambulist, an intimate relation *(rapport)*, in such a manner that they communicate with each other, and respond to one another. It suffices to effect this correspondence to touch the somnambulist on some part, such as the hand, or the forehead, at the moment that she is spoken to.

Natural somnambulists likewise present this peculiarity. These touchings excite the animal sensibility and awaken thereby the sense of hearing, and this is instinctively done every day by persons who know nothing of mesmerism. A woman who is asleep or very drowsy does not answer your calls; you touch her, and she awakes, speaks, and answers your questions, whatever may be the nature of the excitant, be it a stick of sealing wax, or one of glass, or a finger.

Another phenomenon which mesmerists attribute to this pretended intimate *rapport* or connexion is, the communication of the thoughts, the desire of the magnetizer to the magnetized, or rather the great attachment of the somnambulist for her magnetizer—a submission so complete and absolute to all his orders, and a dependance so great, that M. Rostan and M. Filassier do not hesitate to compare it to that of the dog for his master. "This is easily explained," as M. Debreyne well remarks, "by the habitual relations more or less intimate between them, by their sympathetic affinities, or by sexual influence," "Of all magnetic phenomena," says M. Rostan, "that which is produced oftenest, easiest, and most infallibly is the prohibition of the movement of a member; two or three passes or gestures throws it into the most complete state of immobility; it is altogether impossible for the person magnetized to move it in the least. It is in vain for you to excite it to movement, the thing is impossible, it must be deparalyzed before she can use it. To effect this, other passes become necessary.*

These pretended paralyses or palsies, which are similar to the fantastic imaginations of certain monomaniacs, ought to be attributed to the influence of the fascinating ascend-

* Cours elementaire d'Hygiene.

ancy the magnetizer exercises on his somnambulist. A word or a magical gesture commands a member to become completely immovable, and immediately the person whose imagination is fascinated, believes herself deprived of the use of the member, or even of that of her tongue, and remains as if paralyzed and dumb. Thus it is that, in certain monomanias, the patients say they are not able to walk, because they imagine their limbs are straw or glass. And there can be no doubt that all these apparent and imaginary palsies would disappear immediately at the aspect of an imminent and formidable danger, such as a sudden inundation or a frightful conflagration. Hereafter we will speak of the palsies that are said to be produced by a mere act of the will, or by a mental command.

Before leaving this part of our subject, we will advert for a moment to the following case of spontaneous somnambulism, quoted by Dr. Dunglisson, from Dr. Belden, of Springfield, Vermont. "It occurred in a young female seventeen years of age, and the phenomena were attested by numerous observers. One striking circumstance in this case, was the astonishingly developed impressibility of the eye. As an evidence of this, when Dr. Belden, in order to test the sensibility of that organ, took one evening a small concave mirror, and held it so that the rays proceeding from a lamp were reflected upon her closed eyelid, when the light was so diffused, that the outline of the illuminated space could scarcely be distinguished; it caused, the moment it fell on the eyelid, a shock equal to that produced by an electric battery. This female could see as well, apparently, when the eyes were closed as when they were open."*

In this case the patient might have seen between the eyelids, no matter how closed soever they may appear to have been. The experiments we have already detailed would lead to this view. But there is another medium that may be pointed out, and which hitherto has not, perhaps, received the attention it merits; we mean the eyelids themselves. Now the lids are, to a certain extent, semi-transparent, and our daily experience proves that we can distinguish through them not only light from darkness, but also vivid colours. If the sensibility of the visual organs, or, if you will, of the owners of them, should have been from any cause much increased, may not objects

* Dunglisson's Human Physiology, vol. 2.

then be distinguished through the substance of the lids themselves? We think the fact referred to, if thoroughly examined, would aid much in explaining some of the phenomena of somnambulism, whether natural or magnetic. In fine, a last phenomenon which characterizes still more magnetic, than it does natural somnambulism, is complete forgetfulness, on awaking, of all that took place in that state.

The phenomena we now proceed to examine are those which are outside the known laws of physics, of physiology, and of pathology, and we will commence with the most extraordinary one, such as sight by the forehead, the hinder part of the head, the pit of the stomach, the tips of the fingers, &c., confining ourselves to the principal parts cited by grave and learned authors.

M. Rostan, who, be it remembered, is, or was, a distinguished professor of the Faculty of Medicine of Paris, writes thus:

"The following is an experiment which I have often repeated, but which at last I had to discontinue because it fatigued prodigiously my somnambulist, who told me that if I continued it she would become insane. This experiment was made in the presence of my old colleague and friend, M. Ferrus. I took my watch which I placed three or four inches from the occiput, or back of the head. I asked the somnambulist if she saw anything. 'Certainly; I see something that shines; it hurts me.' Her physiognomy gave indication of pain, and ours ought to express that of astonishment. We looked at each other, and M. Ferrus, breaking the silence, said to me: 'Since she sees something that shines, she can doubtless tell what it is.' 'What is it that you see shine?' 'Ah! I don't know; I cannot tell.' 'Look closely.' 'Wait, that fatigues me —wait—(and after a moment of great attention)—it is a watch.' This was new subject of wonder to us. 'But if she sees the watch,' said M. Ferrus to me again, 'she can undoubtedly see what o'clock it is.' 'Can you tell me what hour it is?' 'Oh! no; it is too difficult.' 'Pay attention, now; try hard.' 'Wait, I'm going to try. I will perhaps tell the hour, but I can never see the minutes.' And after having searched with the greatest attention: 'It is within ten minutes of eight,' which was exactly the time. M. Ferrus would repeat the experiment by himself, and it was with the same success. He made me turn the hands of the watch several times; we presented it to her without having looked at it ourselves. She was not deceived."

Here is another fact, still more marvellous, if possible:

"I pretended to magnetize one of my female friends, but the manœuvres I exercised on her were all made with the firm will of acting on her, a somnambulist); although placed at some distance from me, she did not delay falling asleep, and going into the state of somnambulism. I expressly caused all the lights to be removed from the place we were in, so that we were in the dark. I took my watch with all the necessary precautions, that it may not be perceived by the somnambulist, and I placed it on her forehead, the dial-plate being directed to the skin, and the rest of the watch being sustained and wholly concealed by the palm

of my right hand. I put the fingers of the other on her eyelids to increase and maintain their seclusion, which, indeed, was already complete. 'What have you on the forehead?' I asked the somnambulist. 'A watch,' she replied after some little reflection.* 'See what the hour is.' 'I cannot.' 'Look at that.' 'I will do so; the long hand is on the six; the short hand is on the seven.' We passed into the adjoining room, and were enabled to ascertain that it was half past seven by the watch. I turned several times the hands of my watch, without knowing myself at what hour they stopped; then I placed it with the same precautions on the occiput of the somnambulist. 'What hour is it now by the watch?' She remained a long time in a recollected state, and at last said, 'The long hand is on the five, and the shorter one between the three and the four, but nearer the three.' I passed into the lighted room, and I saw, in fact, that my watch showed twenty-five minutes past three."†

"The friends of M. Falassier placed the watch on the pit of the stomach, above her clothing, and she saw with the stomach as well as with the forehead and the occiput." Behold then the sense of sight in three places at one time. In the way of such prodiges it is only the first step that requires much credulity. We doubt much whether these somnambulists, however lucid they may appear, would bear a rigid scrutiny, such as that of the commission of the Royal Academy of Medicine, of 1837.

Now what answer is to be given to those savants who tell us, "We have seen such and such a marvel." It is the proper case for saying: "Since you have seen it, I have no reason to disbelieve it; but, if I had seen myself, I would not have believed it; I would suspect there was some collusion in the matter." There are some errors, as even Cabanis himself well remarks, of which only men of intellect are alone susceptible. Sight by the occiput, and without the aid of the eyes, is one of those absurdities which ought to be immediately rejected and scouted as contrary to the laws of physics and of those of animal organization, and especially as contrary to common sense. Common sense, and sound philosophy, in fact, exclaim aloud to all, that there can be in this pretended occipital vision no kind of causality or possible relation of cause and effect; that, from the organization of the occiput, there can result no appearance of the final cause of sight, because this organization has no relation of nature or form with light, to refract, or to modify it, and to transmit

* QUERY.—Could not the ladies in this and the preceding case have distinguished the object by *hearing*, that is by hearing the *ticking* of the watches? Perhaps there is something in this circumstance that would suffice to explain all the phenomena in the two cases.

† Quelques Considerations pour servir a l'Histoire du magnetisme animale.

the impression of it to the brain or the sensorium; and, lastly, because nothing can exist without the essential or necessary condition of its existence. So, there is no mechanical action without a machine, no vital function without an organ, no digestion without a stomach, no respiration without lungs, no sensation without an organ of sensation or a sense, and, consequently, there can possibly be no true sight without eyes.

It will avail little to oppose to us the state of ordinary and natural sleep-walkers, because there is great reason to believe these do not really see at all, or, at most, but very rarely, for, if they really saw, they would be in communion with the outer world; they would awake immediately, or rather they would not be veritable somnambulists. It must be remembered that the minds of these persons are concentrated upon a particular train of thoughts. If they appear to show much address and agility in their nocturnal walks on the roofs of houses, it is, perhaps, because they do not see. Ignorance of the danger gives them an assurance which wonderfully preserves them from accidents—a consequence which would be almost sure to follow if they should suddenly awake; they would see the danger; their minds would become troubled, and they would inevitably fall. So, it is well known that it is dangerous to awaken a night-walker who is placed in a perilous situation. Besides, it is certain that, notwithstanding the adroitness and pretended lucidity of these sleep-walkers, they often fall from roofs and windows and are killed.

But how explain these rare and singular cases where somnambulists have been seen in a state of lucidity composing and writing verses and discourses in the middle of the night? We are assured, on high authority, that a young French ecclesiastic, who was a somnambulist, arose in the night to correct a sermon he composed or was composing. In the words *ce divin enfant*, he substituted *adorable* for *divin*. Later, perceiving the hiatus, he added a *t* after *ce*. We may well believe that in this case, and in other similar ones, the somnambulists have been able, by an extraordinary exaltation of the sensibility of the optic nerve, to see enough to enable them to write, during certain nights, rendered somewhat lightsome by moonlight, or even starlight; and if they saw, it was at least with their eyes open or probably half open. All that, then, proves nothing in favour of the pretended sight by the stomach, forehead, &c.

It the magnetic facts above alluded to were real, they

must be attributed to a supernatural power; they would be a kind of true miracles. Now it requires no very profound knowledge of religion to be convinced that God performs no miracles but for an object worthy of himself, and to manifest his divine attributes. It would, then, be ridiculous to think that he, who is the Sovereign Wisdom, would, without reason, and without an end worthy of himself, cause a man to see with the back of his head or with his stomach.

But it is said the facts exist, and facts are proverbially stubborn things. Grave, learned, and truthful persons have seen them, attested them loudly, and nothing can resist the force of facts. Be it so; but it is certain that grave, learned, and truthful persons are not exempt from every kind of error or deception. They may be deceived in some respects by a prestigious subtlety, or in a manner that is unknown to us, but which is still possible; and they may deceive themselves. Who can prove with certainty that the magnetized have not believed to have seen, by the occiput, what they really did not see; in a word, that they have not divined or guessed what was really the case. It is well known that they often deceive themselves.

According to the avowal of even M. Rostan himself, "the most lucid somnambulists often commit frequent errors. I would even say that the cases in which they are deceived are the most ordinary." And elsewhere: "It must, however, be confessed that, in the majority of cases, somnambulists deceive themselves, and that the desire to appear clairvoyant makes them say they see what very often they do not see." And when, by chance, they hit on the truth, we are reminded of the words of Balmes, in his "Art of Arriving at Truth." In giving reasons for the confidence sometimes excited by a delusion or false light similar to magnetic lucidity, that learned Spaniard judiciously remarks: "It is because its least successes enjoy from their very rarity the privilege of exciting in the highest degree our admiration; it is because we are astonished to see it in the midst of its blindness hit on the truth, when we so often surprised it in a contrary direction; dazzled by the exception, we give it credit for discernment, which it does not and cannot possess."

Who, on the other hand, can give us assurance that the magnetizer or the experimenter is not deceived himself in regard to the qualities of the objects seen, or that by an optical illusion or a sudden hallucination he has not mistaken

one thing for another, or imagined a fantastic object which has no real existence. In every case we prefer believing that one or the other has been deceived, or that one has deceived the other designedly or otherwise, than be persuaded that the laws of nature have been interrupted or inverted without any end worthy of its author. We feel so invincible a repugnance to believe these asserted facts, which are in opposition to the organism and to reason, that we would prefer saying with theologians that this optical fascination, granting the facts to exist, must be the work of the demon, or of evil spirits.

And, in fact, no Christian philosopher can deny that these spirits can see in the dark, or rather there is no physical darkness for these incorporeal beings. These superhuman intelligencers may then do what human beings are sometimes capable of doing, and it is still easier for them to communicate thoughts to men, or the knowledge of objects and their properties, since all men, as is well known, are capable of doing these things. This, then, if it were really done, would after all be but a miracle of the second order, operated by a supernatural agent, or by the spirit of evil, for the purpose of establishing and accrediting a vicious doctrine, erroneous in its principles, and immoral in its application, as will be seen hereafter.

From all that we have said it must be evident: First, that the reality of sight without the aid of the eyes, and by organs other than the eyes, cannot be admitted unless by a miracle; but this we have shown to be impossible; or, secondly, that the fact, however extraordinary and abnormal it may be, is still purely natural and physiological—a conclusion which it is equally impossible to admit, because it is contrary to all the laws of physics and animal organism. There remains, then, no other possible agency but human or diabolic artifice. To confine ourselves to the former, or human agency, we conclude that the magnetizers and the magnetized have deceived us, or have been themselves deceived, deluded, cheated, by their own adroit artifices and prestigious subtleties.

To say briefly what we think of vision by the occiput, and all these other extraordinary, marvellous, and anti-physiological facts of mesmerism, collusion between the magnetizer and the magnetized is undoubtedly possible; this is admitted by all parties. Now we avail ourselves of this possibility, and until it is removed or upset, we deny the facts

altogether, because we prefer believing that two persons have lied than admit the subversion or the reversing of the laws of nature, or the needless and gratuitous intervention of a supernatural or superhuman agency. Our views are summed up in the maxim of Marescot: *A natura multa, plura ficta, a dæmone nulla.*

Whether magnetism is a true science or a false one; whether it is an occult or a cabalistic one, is of comparatively little importance in the grave and fearful question to which we now turn our attention. It will always be found true that animal magnetism exists sometimes by the somnambulism it produces; that it often exists by the nervous phenomena or accidents it causes; and, lastly, that it always exists by the processes or proceedings that constitute it. Now, is there not moral danger in these proceedings, in the nervous accidents that may occur, and especially in the state of magnetic sleep? This is what we now proceed to examine.

As regards the proceedings, let us first call to mind the principle qualities which the magnetizer must possess. According to M. Rostan: "It is necessary that the magnetizer should have nothing in him that is repulsive, that he should be in good health, strong, and of mature age; that he should be grave and affectionate; that he should be superior, if possible, to the person that is magnetized; * * and exercise some ascendancy over her." In another place the same author adds: "Among persons who practise magnetism those who are lively, ardent, enthusiastic, succeed best." As respects magnetic subjects, the best for obtaining striking results from, are, as we have already mentioned, young ladies, very nervous, sensitive, impressible, and especially hysterical, that is to say, more or less ardent, amorous, or eratic.

Let us now call to mind the attitudes and conditions prescribed by mesmerism. The magnetizer and the person to be magnetized are sitting near each other, face to face; they touch each other by the feet, the knees, the hands, and even by the eyes; that is to say, by a continual exchange of looks. After these affectionate preliminaries come different other touchings on the head, the shoulders, the arms, which are continued to the feet, and sometimes to the pit of the stomach.

It certainly is not necessary to be a great moralist, and to have a profound knowledge of the human heart, to judge

of the effect these mysterious manœuvres may produce on a young female who is very impressible, and perhaps, in the grave magnetizer, who "has nothing in him that is repulsive; who is in good health and strong"; that is to say, who is young, handsome, and replete with health. And how will it be if the magnetized subject is hysterical? The most experienced physicians know the wonderful instinct of certain hysterical ladies, which enables them with shut eyes, and in the midst of darkness, to discern the presence of men; by a kind of lucidity, not magnetic, which is peculiar to them, they often distinguish very well persons of the other sex. What may be expected under such circumstances has, unfortunately, been but too well verified by experience.

We will now say a few words about the dangers of magnetic sleep. It is on this rock that innocence and virtue may and do make the most fatal and the most deplorable shipwreck. "It cannot be doubted," says Dr. Dupau, "that the magnetizer can exercise the greatest moral influence on the person magnetized. * * * Cannot one then know the secrets of families, and become acquainted with the dearest and most sacred interests, &c. Moreover there arises from these intimate relations, from this interchange of looks animated by the kindliest sentiments, from these strange and agreeable impressions, from this state altogether new, there arises a complete and absolute attachment for the magnetizer. Gratitude carried to the enthusiasm of passion exalts thus all sentiments of affection. You can now judge of what must happen if the somnambulist is a young woman, and the magnetizer has the qualities to please."

Another celebrated physician writes: "If the infamies and horrors that have been lately revealed to me are true, and, unfortunately, it is impossible for me to doubt of them, I cannot avoid being sadly and painfully convinced that animal magnetism may become the means of the most execrable corruption that ever came from hell."

But, in order that it may not be said we speak under the impression of a strong prejudice, and that we exaggerate the dangers attached to the practice of mesmerism from a good motive, or the desire of preventing possible disorders, we will present its moral character as delineated by M. Rostan, undoubtedly the most learned defender of the system. The following are his words:

"The magnetized is in absolute dependence on the magnetizer; in general she has no will but his; moreover, whenever she would become

opposed to her magnetizer, the latter can, when he pleases, deprive her of the faculty of acting and even of speaking. It is, as we have said, one of the phenomena that is produced with the greatest ease. What terrible consequences may there not result from this omnipotence? What woman, what girl, can be sure of coming out unviolated from the hands of a magnetizer who would have acted with so much the greater security that the remembrance of what has passed is, on awaking, entirely forgotten. Magnetism, it must be said loudly, compromises in the highest degree the honour of families, and in this respect it ought to be denounced to governments. But supposing for a moment that the magnetizer, who is commonly young, or an adult who enjoys good health, does not take advantage of the facility he has of seducing his somnambulist; that his virtue enables him to triumph over the allurement of the *tete-à-tete*, and of the impunity that, ashamed of his business, he rejects with horror every criminal idea, which is to require a great deal from human nature, how many other dangers do there not still exist?

"Cannot a magnetizer draw forth important secrets and turn them to his advantage? Is it not known that the happiness of families is often dependent on the secret of certain circumstances. In one, its origin is concealed, in another, its fortune; in this, the disease of one of its members, in that, an ambitious project, &c. May not the discovery of some of these secrets cause the ruin of a whole family? But that is not all. The influence of the sexes has been denied; but that is wrong. This influence is very powerful. The somnambulist contracts an unbounded gratitude towards her magnetizer. From that, to a passion, the way is not far. I believe that, if violence is easy, seduction, which is less odious, is still more so. How could you resist repeated touches, tender looks, daily cohabitation, manifestations of interest on the one hand, and of gratitude on the other. * * * * The intimacy is established, * * * the consequences may be foreseen. * * * I wish merely to say that it (magnetism) is an occasion for the corruption of morals; and that there are persons who must succumb to the temptation, &c. Thus animal magnetism may be dangerous for the health; it is also dangerous for public morals."

We are not seeking to prove that animal magnetism is a mere nullity, but that it is a thing different from what it is pretended to be by the magnetizers; and, further, that it has no particular fluid for an agent. Further back we proved that the phenomena, said to be magnetic, and which may be reasonably admitted, are all within the domain of physiology and of pathology. It follows, as a consequence, that mesmerism is only a controlling of the nervous influence and of the immense power of the imagination in everything that is physiological and pathological, or, in other words, true and rational; and that in those things which are marvellous and anti-physiological, this control is united with human artifice and fascination, that is to say, with either juggling, deceit, or collusion.

The character of a true science, as the Abbé Frere justly remarks, ought to be founded on recognized and real properties, on constant laws, and on phenomena that are produced

constantly in the presence of the cause. But all these conditions are wanting in the case of mesmerism. It is a fact admitted by all that it does not affect everybody; even among its own chosen subjects it does not affect more than one out of ten. The same uncertainty exists in regard to the phenomena. The sleep is more or less profound; some subjects are lucid, others not so; some answer questions, others remain mute; the most lucid ones are frequently deceived, and nothing is more contradictory than their answers. And let it be remembered that these magnetized persons are, for the far greater part, addicted to self-love, jealousy, exaggeration, and falsehood. Now, what consistence could a science acquire that has no foundation but the versatility of such characters, who are not confessedly in a natural state?

Again: the principle or the magnetic agent is absolutely unknown. Each magnetizer gives his opinion, and that is all. Some say it is the nervous fluid or influence, others, caloric; some, that it is electricity, others, again, that it is the will; and some, in fine, will have it that it is life itself. There are some writers who, astonished at the phenomena of magnetism, and finding them in disproportion with human power, admit as a consequence the presence of a spiritual agent different from the soul. Indeed, several physicians, German ones especially, hesitate not to recognize in it the intervention of angels, or that of demons.

Of these different opinions we will notice only one, the one perhaps most prevalent at the present day, and which originated with M. Rostan, namely, that the agent of magnetism is the nervous fluid. But all the data of physiology and analogy prove that the nervous fluid is not emitted a great distance, or even a small one, outside the body, but that it circulates in the nerves pretty much the same way that blood does in the blood-vessels. It does not go out of the nerves, then, no more than does the blood go out of its vessels; and if in some rare cases the blood transudes through the pores of its vessels and of the skin, it presents no longer any sign of vitality or of a stimulating or animating quality. The same may justly be expected to be the case with the nervous fluid.

If the nervous fluid be the sole cause of magnetic phenomena, why does it not act on the lower animals which have nerves, and which, consequently, ought to have a nervous fluid?

And, on the contrary, why can inanimate bodies or things

deprived of nerves, such as metallic rods, tubs, and trees become, as it is asserted by magnetizing they do, instruments or mediums of magnetic phenomena? It is necessary that they should be charged with the magnetic fluid, which the magnetizer emits or communicates to them, and that they, in their turn, should emit it to the individuals that are in the nervous atmosphere (as it is called) of the nerveless bodies—a supposition which would be altogether supremely absurd and ridiculous.

Our worthy friends, the magnetizers, assure us they can, by a pure act of the will, set persons to sleep at a great distance, and behind partitions; but, then, how is the nervous communication established? The swiftness and penetration of the magnetic fluid they compare to those of light, caloric, electricity; but it is well to remember that comparisons are not proofs, and that light does not pass through stone walls.

It will now be seen that a system, based upon such conflicting and contradictory opinions, as regards the nature of magnetism, can have no value whatever in a scientific point of view, and that animal magnetism itself, unless it be considered a kind of fascination, has not been proved to have a real existence.

We will close this paper with a word or two on the therapeutic or curative value of magnetism. If it be true that some nervous or moral diseases have been cured by the practice or proceedings of mesmerism, these sorts of cures ought to be attributed to the power of ordinary therapeutics; that is to say, to moral medicine, and not to a special virtue peculiar to animal magnetism and inherent in it. It is known in fact that by ably exciting, directing, and controlling the nervous influence, and by striking appropriately the imaginations of nervous, melancholic, hypochondriac, hysteric patients, the most happy results are often obtained. The records of medecine abound with such cures. There has been, then, no cure produced by mesmeric practices that may not have been obtained by the ordinary resources of medicine, and, in every respect, in a more decorous and safer manner.

What evils, what accidents, may not be caused by the perturbating practices of mesmerism. The magnetizers themselves acknowledge the fact. One of these gentlemen, M. Bertrand, tells us that nothing is more common than to see patients experience the most grievous and lamentable

accidents in consequence of the ideas they had during their somnambulism. Even M. Rostan assures us that "magnetism, badly directed, may cause the gravest accidents. I have seen it," he says, "produce general uneasiness, acute pains, obstinate head-aches, violent cardialgias, paralyses temporary, but very annoying and very painful; a general perturbation of the system that predisposes it to every kind of nervous affection; a feeling of excessive fatigue, great weakness, extreme emaciation, suffocation, fainting; and I doubt not that even death itself would be the result if the magnetizer were to paralyze the muscles of respiration. Mental alienation and melancholy have frequently resulted from it." In fine, cases have been recorded where the patients died in the hands of the magnetizers.

We now take our leave of this wonderful system, and leave our readers to form their own estimate of it. After all we have said it must be candidly avowed that, whatever may be the conclusion we may come to in regard to its character, animal magnetism has still something about it that (granting all the facts reported of it to have a real existence) is, in the present state of our scientific knowledge, wholly inexplicable.

ART. III.—1. *Report of the Secretary of the Treasury on the State of the Finances*, for the year 1865. 8vo., pp. 342.

2. *Report of the Secretary of the Treasury on the State of the Finances*, for the year 1866. 8vo., pp. 394.

THE general public has but a vague idea of the combination of talents required for the successful management of the finances of a great nation. In this country, especially, the financial department of the government is regarded as little more than a splendid sinecure, in which it would be superfluous to place a man of more than third or fourth-rate abilities. This is a grave error, and one which could have originated only in thoughtlessness. There never was a good financial minister who was not a statesman; nor was there ever a statesman worthy of the name who did not devote his most serious thoughts to the finances of his country. This is equally true of William Pitt, Sir Robert Peel, and Lord

Castlereagh. Nor is it less true of the most illustrious statesmen of France, including Sully, Richelieu, and Talleyrand.

We shall find also that it is the greatest monarchs who have paid the most careful and intelligent attention to the same department, including Louis XIV., Frederick the Great, and Napoleon I. The greatest conqueror of modern times thought it less dangerous to put the command of his armies into incompetent hands, than the management of the national finances. The well known esteem and friendship of Napoleon for scientific men induced him to give the great Laplace charge of the financial department of his government; but he soon found that one might excel all his contemporaries in mathematics and astronomy, and yet be utterly incompetent to manage the finances of his country.

And if we pursue our investigation a little further, we shall learn another important fact, namely, that in proportion as statesmen have rendered themselves illustrious by their wisdom, foresight, and patriotism, have they been opposed to paper money and in favour of a metallic currency. That some of them have made use of the former is no argument against the fact. They did so when they could not avoid it, the same as the greatest epicure, if a sensible person, will rather eat a piece of dry bread when hungry, than fast any longer in expectation o fa more luxurious meal. But they have discarded it again as soon as possible, and restored the metallic currency.

It is true that there have been many high functionaries in different countries who thought paper money as good as any other; and there are such at the present day, but there is not a real statesman amongst them. Mere politicians may indeed oppose a paper currency when it is first introduced, because, having been used to the coin they think nothing else would do; but when they see in a year or two that no great calamity has happened to the country, and that all kinds of commodities can be purchased for paper as well as for gold or silver, they have no desire to see the latter resumed as the currency of the country. On the contrary, they are as much opposed to it as they were formerly to the paper currency; they think that "well enough should be let alone;" that serious evils would result from the change; and that those who are so anxious for the resumption of the metallic currency must either be very stupid or actuated by unworthy motives.

Still more will they insist on this when they see that the national debt is being diminished. They give the credit of the diminution rather to the paper money than to the manager of the public finances, no matter what efforts the latter may have made to diminish the amount of paper money in circulation as a necessary preliminary to the resumption of specie payments. When great resources like ours are skilfully managed, the public debt can be reduced, no matter what sort of currency we have. Thus, if our debt is being largely diminished from year to year, it is not by the aid of our paper currency, but in spite of its injurious influence.

Had the present Secretary of the Treasury been properly sustained in his efforts to resume the metallic currency the diminution of our debt would now have been much greater than it is, although so considerable that it has excited the surprise of the most enlightened statesmen of England, France, and Germany. But the position of Mr. McCulloch has been an anomalous one. Mr. Lincoln never made a more judicious appointment than when he placed him in charge of the Treasury.

Although Mr. Lincoln had but little knowledge of political economy as a science, few had clearer ideas on the difference between a metallic currency and a paper currency. He was aware of the views entertained on the subject by Mr. McCulloch, and knew how much sounder they were than those of Mr. Chase. The preference thus evinced by Mr. Lincoln was all the more creditable to him from the fact that one was a prominent politician, who, from his influence as such, might be regarded as a valuable ally; whereas the other was simply a business man, who scarcely paid any attention to politics further than honest patriotism seemed to require. But Mr. Lincoln had the shrewdness to see that Mr. McCulloch was no ordinary banker; he felt satisfied that he knew more about the nature of money than its utility to individuals; and it is well known that his acceptance afforded Mr. Lincoln great pleasure.

The differences between the new President and Congress could not have failed to exercise a discouraging influence on the Secretary of the Treasury. Congress has given him no hearty support since those differences commenced, and the support of the President could avail him but little. Mere politicians of all parties oppose rather than encourage him in his great work of diminishing the public debt, and preparing for

the resumption of specie payments; the Radicals do so because he is the Cabinet Minister of a President whom they think it their duty to abuse and threaten as if he were their coachman, and the Democrats because it was as a Republican he came into office, and because, ergo, it is probable that he is a Republican still. It is true that the honest, thinking men of all parties approve his course and sustain him as much as they can; but, unhappily, this class are so few that their calm, earnest voice is drowned in the partisan clamours of the thoughtless, who know no more about the nature of currency, further than that certain things may be bought and sold for it, than they do about the nebular hypothesis.

In order to appreciate what Mr. McCulloch has accomplished, it is necessary to bear these facts in mind. But something more will be necessary in order to understand whether heis right or wrong in urging the early resumption of specie payments, especially in view of the adverse representations almost daily made by those who regard themselves as public instructors—statements which, if true, would show that not only paper money, but leather money, stone money, wooden money, &c.—the kinds used by all the barbarous nations of antiquity, and which are still used in several of the negro monarchies of Africa—are quite as good as gold and silver, if not better, for a great nation like ours.

We will remind our readers first that the prevalence of this opinion among the masses has not deterred Mr. McCulloch from insisting, time after time, on what he—who has thoroughly studied the subject in all its bearings—regards as the better, safer, and more honourable course; and we will then proceed to show that in this he is sustained by the most distinguished political economists and ablest statesmen of all nations.

In his Report for 1865, now before us, the Secretary fully discusses the currency and the public debt. After recognising the right of Congress to borrow money and issue obligations for loans, especially in time of war, he proceeds to show that if those obligations are put in the form of a circulating medium as money, and made a legal tender, the sooner, after the necessity that brought them into existence has passed away, they are set aside the better.

"The present legal-tender acts were war measures, and while the repeal of those provisions which made the United States notes lawful money is not now recommended, the Secretary is of the opinion that *they ought not to remain in force one day longer than shall be necessary to en-*

able the people to prepare for a return to the constitutional currency. It is not supposed that it was the intention of Congress, by these acts, to introduce a standard of value, in times of peace, lower than the coin standard, much less to *perpetuate the discredit which must attach to a great nation which dishonors its own obligations by unnecessarily keeping in circulation an irredeemable paper currency.*"—P. 4.

This is bold but sound language. It embodies the results of the experience, for centuries, of the greatest nations of the world, and those of the researches and calculations of the most accomplished political economists. Conscious of having right on his side the Secretary does not hesitate to deny that Congress has any right to continue the anomalous currency in time of peace. No mere politician would have dared to make the following comments in December, 1865:

"It is a well-established fact, which has not escaped the attention of all intelligent observers, that the demand for money increases (by reason of an advance of prices) with the supply, and that this demand is not unfrequently most pressing when the volume of currency is the largest, and inflation has reached the culminating point. Money being an unprofitable article to hold, very little is withheld from active use, and according to its increase prices advance; on the other hand a reduction of it reduces prices, and as prices are reduced the demand for it falls off; so that, paradoxical as it may seem, a diminution of the currency may in fact increase the supply of it.

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"An irredeemable paper currency may be a necessity, but it can scarcely fail, if long continued, *to be a calamity to any people. Gold and silver are the only proper measure of value.* They have been made so by the tacit agreement of nations, and are the necessary regulators of trade, the medium by which balances are settled between different countries and between sections of the same country. As a universal measure of value they are a commercial necessity. The trade between different nations and between sections of the same country is carried on by an exchange of commodities, but is never equally balanced by them; and unless credits are being established, the movements of coin unerringly indicate on which side the balance exists."—Pp. 5, 6.

No intelligent person who has lived in this country for the last five years has failed to see the proof of these facts, especially those relating to the rise in prices for all the necessaries of life, which has always been in proportion to the inflation of the currency. Be it remembered that if there has lately been a slight decline in the prices of certain commodities, it is because the inflation spoken of by Mr. McCulloch has been reduced; because he has withdrawn a portion of the paper money from circulation. Had he been sustained in his views, much more would have been withdrawn. The future historian will confer high praise on him

as a statesman as well as a political economist, for the efforts he has made in this direction. The following remarks show that if we have still far too much paper money, and that the prices of most of the necessaries of life are still high, the blame does not rest with Mr. McCulloch. After a very able and lucid discussion of this branch of his subject he sums up as follows:

"The Secretary, therefore, respectfully but earnestly recommends—

"First. That Congress declare that the compound interest notes shall cease to be a legal tender from the day of their maturity.

"Second. That the Secretary be authorized, in his discretion, to sell bonds of the United States, bearing interest at a rate not exceeding six per cent., and redeemable and payable at such periods as may be conducive to the interests of the government, for the purpose of retiring not only compound interest notes, but the United States notes.

"It is the opinion of the Secretary, as has already been stated, that the *process of contraction cannot be injuriously rapid;* and that it will not be necessary to retire more than one hundred, or, at most, two hundred millions of United States notes, in addition to the compound notes before the desired result will be attained. But neither the amount of reduction, nor the time that will be required to bring up the currency to the specie standard, can now be estimated with any degree of accuracy. The first thing to be done is to *establish the policy of contraction.* When this is effected, the Secretary believes that the business of the country will readily accommodate itself to the proposed change in the action of government, and that specie payments *may be restored without a shock to trade, and without a diminution of the public revenues or of productive industry.*" P. 14.

The Thirty-ninth Congress would have been much more wisely and creditably occupied in attending to these recommendations than in making those partisan "laws" which, if they have not already done much mischief to all classes, not excepting the party who projected them, will continue to exercise an injurious influence as long as they are allowed to remain on the statute-book.

But it was not alone the inflation of the currency that Mr. McCulloch warned Congress against in his very first Annual Report; he was equally earnest and outspoken in warning them against the rather remarkable predilection which they evinced in favour of oppressive taxation. Before we take leave of the Report of 1865, we will quote an observation or two on this subject, as they may afford the reader some additional aid in determining how it is that the Secretary of the Treasury has not received from Congress that support to which his enlightened and statesmanlike policy so eminently entitled him. No one could be less arrogant in adducing his views than Mr.

McCulloch; with characteristic modesty and good sense he carefully avoids whatever might seem dictation or censorship. Before alluding to the results of bad legislation, he admits the difficulty of the measure legislated upon, so as to save the feelings of the blunderers, as in the following instance:

"To impose taxes judiciously, so as to obtain revenue without repressing industry, is one of the highest and most difficult duties devolved upon Congress. Taxation which in one year may be scarcely felt may the next year be *oppressive;* and that which may not be burdensome to those who are well established in business may be fatal to those just commencing. Every branch of industry has its infancy, and *ought to be encouraged by liberal legislation.* Whatever of industry or enterprise is destroyed, by injudicious taxation or otherwise, *is a damage to the national welfare.*

"Heavy taxation may *drive capital from our shores, or prevent its employment* in the manner most advantageous to the country, and thus prevent that demand for labor which is the best security for its proper reward.

"The taxation which is now extremely productive, may in a few years become unproductive, or engender a spirit of opposition and discontent which may endanger the national credit."—P. 27.

It would have been well that those to whom these hints were given had acted on them in time. They would have had a much better prestige themselves to-day than they have; the multifarious business interests of the country would have been better; so would have been the character of the government throughout the world. As it is the party who were then in the ascendant are everywhere looked upon with suspicion; the qualities most prominently associated with them in the public mind are fanaticism, and an unmistakable disposition to oppress those who differ with them in opinion. Nor can it be denied that the charges thus made against them are well founded.

If wise or intelligent legislation consisted in imposing heavy taxes on all classes, but especially on the poor; so that we are now much more heavily taxed than the Austrians, or the Russians; then, indeed, those to whom Mr. McCulloch gave the above hints nearly three years ago, might be said to have acquitted themselves well. It was, however, of no use to warn them. On all questions in which the country at large had an interest their memory was defective. They cared nothing about the resumption of specie payments, for the simple reason that they gained rather than lost by the paper money; as long as they had it in their power to raise their own salaries, and secure certain perquisites besides, it was of very little consequence to them how the masses suffered.

It is not strange, therefore, that the recommendations of the Secretary of the Treasury received little attention during the year 1866. In his next Report he is equally earnest and bold in pointing out the real financial interests of the country. After discussing the receipts and expenditures of the United States for the year, and showing the reduction he had effected in the public debt, he returns to the subject of the currency as follows:

'The Secretary regrets, notwithstanding the large reduction of the national debt, and the satisfactory condition, in other respects, of the national treasury, that little progress has been made since his last report towards specie payments. The views presented by him in that report, *although indorsed in the House of Representatives by a nearly unanimous vote, were not sustained by corresponding legislation.* Instead of being authorized to reduce the paper circulation of the country, according to his recommendations, the amount of United States notes which he was permitted to retire was limited to $10,000,000 for the six months ending October 12, and to $4,000,000 per month thereafter."—Report for 1866 pp. 8, 9.

Without intending any censure on Congress, Mr. McCulloch has well described its character in this brief passage; for what it means is, that while Congress was ready enough to talk and vote, if the talking and voting happened to be sensible or good, even by chance, they were pretty sure not to be "sustained by corresponding legislation." Further on the Secretary comes to the point still more clearly:

"It may be hardly necessary for the Secretary to remark that his opinions have undergone no change in regard to the importance of a restoration of the specie standard, or the means necessary to effect it. He trusts, however, that he has not been understood as entertaining the opinion that a reduction of the currency would of itself necessarily bring about specie payments, although the chief and essential means to effect the desired result. He regards a redundant legal-tender currency *the prime cause of our financial difficulties*, and a curtailment thereof indispensable *to an increase of labor and a reduction of prices*, to an *augmentation of exports* and a *diminution of imports*, which alone can place the trade between the United States and other nations on an equal and satisfactory footing."—P. 10.

We will show, before we close, that the ablest statesmen of Europe and America fully sustain Mr. McCulloch in regarding "a redundant legal-tender currency as the prime cause of our financial difficulties," &c. The difference between the precious metals and paper, as a circulating medium, is placed in a forcible light by the Secretary. It ought not to be necessary to use much argument to satisfy any one who has resided in this country for the last five or six years that paper money "becomes a false and demoraliz-

ing standard, under the influences of which prices advance," &c. But let the Secretary state the facts for himself in his usual frank and lucid manner :

"There being but one universally recognized measure of value, and that being a value in itself, costing what it represents in the labor which is required to obtain it, the nation that adopts, either from choice or temporary necessity, an inferior standard, violates the financial law of the world, and inevitably suffers for its violation. An irredeemable, and, consequently, depreciated currency drives out of circulation the currency superior to itself; and if made by law a legal tender, while its real value is not thereby enhanced, *it becomes a false and demoralizing standard*, under the influence of which prices *advance in a ratio disproportioned even to its actual depreciation.* Very different from this is that gradual, healthy, and general advance of prices which is the effect of the *increase of the precious metals.*"—P. 12.

In discussing the merits and demerits of the national banking system, Mr. McCulloch is equally straightforward and manly. He reminds Congress that he was not its advocate ; that he had nothing further to do with it than to have used his best efforts, as Comptroller, to put it into successful operation. He is no admirer of the system, although he regards it as an improvement on that which it superseded. This, it must be admitted, is but a slender recommendation ; and slender as it is, he qualifies it as follows : "There are substantial objections to all banks of issue, and if none existed in the United States, it *might be very questionable if any should be introduced!*" We think that this is the general impression among thinking men at the present day, and many even of those who never think have learned to regard it in the same light by simply looking about them and opening their eyes and ears. The truth is, that our present banking system is sufficiently objectionable, but not quite so bad as the government currency, which is money only in name. On this subject, also, Mr. McCulloch has spoken in plain terms :

"The Secretary is not unmindful of the saving of interest which results to the government by the use of its own currency, nor of the favor with which this currency is regarded by the people; but all considerations of this nature are more than counterbalanced by the *discredit which attaches to the government by failing to pay its notes according to the tenor*, by the bad influence of this voluntary discredit *upon the public morals*, and the wide departure which a continued issue of legal-tender notes involves, from past usages, if not from the teachings of the Constitution itself. The government cannot exercise powers not conferred by its organic law or necessary for its own preservation, nor *dishonor its own engagements* when able to meet them, without either shocking or demoralizing the sentiments of the people; and the fact that the indefinite continuance of the circulation of an *incontrovertible* but still legal-tender currency is so generally advocated, indicates how far we have wandered from old landmarks both in finance and ethics."—Pp. 16, 17.

This passage would be sufficient by itself to explain why it is that the Secretary of the Treasury has received but little encouragement from the Radical Congress. But there are still stronger reasons for the fact than any of those we have yet indicated. Be it remembered that Mr. McCulloch has hinted more than once that the North is injured as well as the South by the vindictive reconstruction policy; that which, if carried out, would forever prevent reconstruction. The Secretary has had the shrewdness to see at a glance that the reconstruction policy of the Thirty-ninth Congress is as false and deceptive as its paper money, and still more ruinous in its effects on the country at large. But knowing how sensitive our modern reformers are on all points which might seem to question their superior wisdom and patriotism, he excuses himself—though perhaps mingling with his excuse a slight tinge of satire—for venturing to make any remark on a subject upon which Congress has bestowed so much talk, and so little thought, or common sense:

"In alluding to this subject, the Secretary feels that he steps upon *dangerous ground*, and that he may be charged with introducing a political topic in a financial report; but, in his opinion, there is no question now before the country *more important in its bearings upon our finances than the political, and consequently industrial, status of the Southern States.* Embracing, as they do, one-third part of the richest lands of the country, and producing articles of great value for home use and for exportation to other countries, their position with regard to the general government *cannot remain unsettled*, and their industrial pursuits cannot continue to be seriously disturbed, *without causing such a diminution of the production of their great staples* as must necessarily affect our revenues, and render *still more unsatisfactory than they are now our trade relations with Europe.* As long as the present anomalous condition of these States continues—*as long as they have no participation in the government*, to the support of which they are *compelled to contribute*—it is idle to expect that their industry will be restored or their productions increased. On the contrary, there is reason to apprehend that until harmonious relations again exist between the federal government and these States, the condition of their industrial interests *will become day by day more uncertain and unsatisfactory.* There will be no real prosperity in these States, and consequently no real prosperity in one-third part of the United States, *until all possess again equal privileges under the Constitution.* Can the nation be regarded as in a healthy condition when the industry of so large a portion of it is deranged? And can the labor question at the South be settled as long as the political status of the South is unsettled? Can the national *credit be elevated and the public debt be rapidly reduced* unless the Southern States shall largely contribute to the public revenue? And can such contribution be relied upon as long as they remain in their *present disfranchised condition?* Will the taxpayers of the North continue to be patient, unless their burdens of taxation can be lessened by being equally shared by the people of the South? Regarded thus as a purely financial question, the relation of these States to the federal

Union is an exceeding interesting and important one, and as such it demands *the calm and careful consideration of Congress.*

"The Secretary has thus presented, in such manner as his pressing official duties would permit, his views of the financial condition of the country, the causes of trouble, present and prospective, and the remedies for the same. *If these remedial measures shall be approved by Congress, and enforced by appropriate legislation, he is confident that specie payments may be resumed* by the time our interest-bearing notes are retired, which must be done in less than two years, and probably will be in a much shorter period."—Pp. 23, 24.

We need give no further extracts to show what are the views of Mr. McCulloch on the relative influence of paper currency and metallic currency on the industrial interests and good name of the country. Nor is there any exaggeration in his statements; they possess none of that sensational character which is so common to the official documents of the present day. Whether the Secretary invites attention to the inflation of the currency, the necessity of reducing that inflation and resuming specie payments, or to the injurious effects of the Radical system of reconstruction on all parts of the country, his language is marked by that calm moderation which is an essential characteristic of true statesmanship, and which the mere politician can never command.

Now, if we turn to the most eminent political economists of the principal nations of Europe, we shall find that there is not a single recommendation made by Mr. McCulloch which they do not sustain in the most emphatic manner. An instance or two will suffice. Thus, M. Storch, who has the same reputation on the Continent which Adam Smith has in England, speaks of the paper money issued by government for its own purposes, and which the people are forced to accept, as a deception and spoliation. "C'est-à-dire un mensonage, c'est-à-dire une spoliation, un vol, dans toute la force du terme."* Mr. McCulloch does not apply such terms as this to our paper money; but his arguments show, with sufficient clearness, that it is, nevertheless, a species of robbery. Further on the same writer remarks: "The inanity of this unworthy expedient, and the ruin which it entails, will be rendered sufficiently evident from the lessons of experience."† M. Coquelin, another eminent writer on the same subject, reminds his readers that "paper money commences to decline in value on the very day on which its acceptance is rendered

* Cours d'Economie politique. tome iv., p. 79.

† "L'inanité de cet indigne expédient et les ruines qu'il entraine seront, en outre, rendues évidentes après que nous aurons invoqué les legons de l'expérience."—*Cours d'Economie politique*, &c.

obligatory, because it has ceased to be convertible into gold or silver."* The strongest argument used by demagogues in favour of paper money is that it aids the poorer classes. Mr. McCulloch has amply refuted this by showing its effect in raising the prices of all the necessaries of life.

Those who care nothing for the poor further than to secure their votes, attribute those high prices, not to the depreciated paper money, but to the "monopolizing tendencies" of the rich. This being a plausable representation, the poor readily believe it; and hence it frequently happens that manufacturers and others, who give work to thousands and are really the best friends of the working classes, are hated as "monopolists." Nay, it is too well known that they are often attacked; their establishments are broken into, and plundered or set on fire; although, fortunately, outrages of this kind are comparatively rare, thus far, in the United States. The general course pursued towards our "monopolists" is to strike for higher wages. But are not the employers frequently injured as much in this way as if the mob broke into their stores and carried away a certain amount of flour, meal, or any other commodity? Nay, is it anything worse for the manufacturer or other extensive employer to have ten thousand dollars taken out of his till, than to lose the same amount or more by being forced to close up his establishment for want of hands? If the people could be taught to understand these facts our paper money could not last long; nor could those demagogues, who seek to perpetuate it for their own purposes, continue long in power.

If the working men of our country would only reason they would readily see that if there ought to be any "strikes," they should be against Congress. We do not mean that they should make an attack on that body while in session; their attacks should be made at the ballot box. They should resolve not to vote for one man who is in favour of paper money, or in favour of prolonging the disorganization of the country, and thereby fostering a strife which has already been productive of such incalculable evil. In short, they ought not to give any party or clique their support which would persist in clinging, in time of peace, to a system

* "Le papier-monnaie a commencé à perdre de sa valeur le jour où son acceptation a été rendue obligatoire, parce qu'il a cessé dès lors d'être realisable par le porteur contre la quantité d'espèces metalliques qu'il désigne; c'est-à-dire de se résondre, quand on le souhaite, en ce qu'il représente ou dit représenter."—*Annuaire de l'Economie politique pour* 1859.

which is excusable only in time of war. Even a government which does not respect itself is not entitled to the respect or confidence of others. "As to those who continue to use it (paper money) still," says M. Villermé, "they will experience the disgrace of having in circulation bills, the depreciation of which is a continual reproach of insolvency and of bad faith."* If these writers are not known to our readers as authorities, no such objection can be made to the views of Montesquieu, which are as much opposed to paper money as those of any writer whatever.†

Still more emphatic, if possible, is the testimony of the leading political economists of England, including Adam Smith and Racardo, whose theories have received the sanction of statesmen like William Pitt and Sir Robert Peel, after they had fully tested other theories and found them wanting. Of all recent English writers on currency Lord Overstone is the ablest and most thoughtful. His lordship would have no paper currency without its nominal equivalent in real value. "As a manager of the currency," he says, "it is undoubtedly a sound rule by which to guide itself that, *against the amount of notes out, it shall hold at its disposal* securities and specie; that the amount of securities shall be invariable; and that, consequently, all fluctuations in the amount of notes shall be met by a corresponding fluctuation in the amount of specie in deposit," &c.‡

His lordship has no objection to a paper currency which is convertible at will; nor has any political economist or statesman worthy of the name. But this is very different from paper money like ours, which, in point of fact, is not money at all. "Nothing more sound in principle, nothing more safe in practice," says Lord Overstone, "than to invest a certain portion of the proceeds of a national paper currency *in fixed securities, and to retain the remaining portion in coin or bullion;* taking care that the proportion shall be so

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* "Quant à ceux qui le pratiquent encore, ils éprouvent la honte de laisser dans la circulation des billets dont le discrédit leur est un continuel reproche d'insolvabilité et de mauvaise foi."

† After pointing out four objections to paper money, the philosopher remarks: "Voilà les inconvénients; je n'en connais point les avantages." In the same chapter he says that none but a rich country can sustain a paper currency without falling into decay, &c.: "Car il n'y a qu'un Etat *riche* qui puisse *soutenir* un tel papier, sans *tomber dans la decadence.*"—*De l'Esprit des Lois,* liv. xxii., c. xvi.

‡ Reflections, &c., on the Causes and Consequences of the Pressure on the Money Market.

fixed as to leave the bullion *sufficient to meet all the usual*, and, indeed, *all the reasonably possible fluctuations of amount*."*

But if the views of French and English political economists are applicable to their own countries, still more applicable are they to ours. In other words, a paper currency, which is not convertible, is much more injurious to the United States, for various reasons, than it would be to France or England, should either have recourse again to that dangerous expedient. This every intelligent person ought to know from experience, for no country has suffered more from commercial revulsions. Let those who doubt this consult our authorities; nor need they confine themselves to those who have written essays or pamphlets on the subject. Any of our educated public men, who have spent sufficient time in Europe to be able to institute a comparison between the financial system of France or England, with that of our own country, have not failed to perceive how much more liable we are to revulsion, arising from the excessive use of paper money, than either of those countries.

We will first turn to the views of Mr. Buchanan. Whatever fault may be found with the manner in which that gentleman discharged a portion of his duties as President of the United States, or failed to discharge those duties, none will deny that he is a good authority on currency. In his message to Congress, at the close of 1857, Mr. Buchanan discusses the causes of our commercial revulsions with great ability, and his views on the subject, especially those relating to paper money and its influence, have been quoted by several English and French writers on political economy as highly important and instructive. All will remember how much the advocates of the present system have depended on the plausible, but very fallacious, argument, that while money is so plenty and business of all kinds is so brisk as it is at present, it is almost ridiculous to fear that we are in any danger of a crisis. Business has seldom been brisker, and the country at large has seldom seemed more prosperous than immediately before the great revulsion of 1857, the causes of which are indicated by President Buchanan as follows:

"Since the adjournment of the last Congress our constituents have enjoyed an unusual degree of health. The earth has yielded her fruits abundantly, and has bountifully rewarded the toil of the husbandman.

* Tracts and other Publications on Metallic and Paper Currency, p. 63.

Our great staples *have commanded high prices;* and up till *within a brief period*, our manufacturing, mineral, and mechanical occupations have *largely partaken of the general prosperity.* We have possessed all the elements of material wealth in rich abundance, and yet notwithstanding all these advantages, our country in its monetary interests is at the present moment *in a deplorable condition.* In the midst of unsurpassed plenty of all the productions of agriculture, and all the elements of national wealth, we find *our manufactories suspended, our public works retarded*, our private enterprises of different kinds *abandoned*, and thousands of skilful labourers *thrown out of employment and reduced to want.*

"In all former revulsions the blame might have been fairly attributed to operating causes, but not so upon the present occasion. *It is apparent that our existing misfortunes have proceeded solely* from *our extravagant and vicious system of paper currency* and bank credit *exciting the people to wild speculations and gambling in stocks.* These revulsions must continue to occur at successive intervals *so long as the amount of the paper currency* and bank loans and discounts of the country shall be left to the discretion of 1,400 irresponsible banking institutions, which from the very law of their nature will consult the interest of their stockholders rather than the public welfare.

"The first duty which these banks owe to the public is to keep in their vaults *a sufficient amount of gold and silver to insure the convertibility* of their notes *into coin at all times and under all circumstances.* No bank ought to be ever chartered without such restrictions on its business as to secure this result. All other restrictions are *comparatively vain.* This is the *only true touchstone*—the only efficient regulator of a paper currency—the only one which can guard the public against over-issues and bank suspensions."

Be it remembered that even at this time the currency was not exclusively paper as it is at present. Irresponsible as those one thousand four hundred (1,400) banking institutions were, they were in the habit of paying specie according as it was demanded, until the crisis. Even then they had the aggregate amount of fifty-eight million three hundred and forty-nine thousand eight hundred and thirty-eight dollars ($58,349,838) in their vaults. But our present banks, although under the immediate control of the government, and styled "National," cannot pretend to pay any specie except to those who purchase it like any other commodity, or who have deposited specie with them under certain conditions. Three months before the crisis of 1857 occurred any one having money in any respectable bank could, in general, get gold or silver on his check as readily as bills, if he preferred the former. But who could now? A prosperous and wealthy institution like the Park Bank of this city could, doubtless, pay out a large amount of specie to its numerous depositors if required to do so ; but the depositors have no more right to expect any such favour from it than they have to expect silk, broadcloth, or diamonds, and all at

a price forty per cent. below their market value; for it must be borne in mind that gold and silver are as much marketable commodities in this country at the present time, as any of the commodities mentioned, and will continue to be so until the resumption of specie payments.

In a word, gold or silver is not money in the United States under Radical predominance, but simply merchandise. If a similar state of things existed under the sway of any other party, we would denounce it, and warn the public against it quite as earnestly as we do in the case of the Radicals; for all political parties are just alike to us, except so far as we may think that one does better, or worse than another. Lest some may object to Buchanan as an authority, however, because he is a Democrat, or because he was guilty of certain important omissions as President, we will turn to Webster, and see whether his views do not sustain the recommendations of Secretary McCulloch quite as fully as those of Mr. Buchanan or anybody else. In glancing over the great orator's speeches, we pause at that on the Sub-Treasury Bill, which he delivered in Congress on the 12th of March, 1838, and mark a passage or two:

"Before leaving altogether this subject," says Webster, "I will say a few words upon the *proper grounds and securities* for a paper circulation. I hold it to be of the utmost importance to prove, if it can be proved to the satisfaction of the country, that a convertible paper currency *may be so guarded* as to be secure against probable dangers. I say, sir, a *convertible* paper currency, for I lay it down as *an unquestionable truth* that no paper can be made equal and kept equal to gold and silver, *but such as is convertible into gold and silver on demand.* But I have gone further, and still go further than this; and I contend that *even convertibility*, though itself *indispensable*, is *not a certain and unfailing ground of reliance.* There is a liability to *excessive issues of paper*, even while paper is *convertible at will.* Of this there can be no doubt. Where, then, shall a regulator be found? What principle of prevention may we rely on?"

Now what would the great statesman and political economist have thought of our paper money had he lived at the present day? Does any one believe that he would have allowed it to continue in existence one day after it was possible to get rid of it? No one acquainted with his views on the subject can have the least doubt that he would have denounced it as a spoliation of the people and a disgrace to the government. But we will extract one passage more from his great speech:

"There will always occur occasional fluctuations in trade, and a demand for specie by one country or another will arise. It is too much the practise, when such occurrences take place and specie is leaving the

country, for banks to issue more paper, in order to prevent a scarcity of money. *But exactly the opposite course should be adopted.* A demand for specie to go abroad should be regarded as conclusive evidence of *the necessity of contracting circulation.* If indeed, in such cases it could be certainly known that the demand would be of short duration, the temporary pressure might be relieved by an issue of paper to fill the place of departing specie. But this *never can be known.* There is no safety, therefore, *but in meeting the case at the moment,* and *in conforming to the infallible index* of the exchanges. Circulating paper is thus kept always nearer to the character and to the circumstances of that of which it is designed to be the representative—the metallic money."

Now the reader can judge for himself whether we have exaggerated the statesmanlike foresight and practical knowledge of political economy evinced by Mr. McCulloch in his Reports to Congress. We think we have shown that no statesman or political economist has clearer or more correct views of the nature of currency, or the difference between paper currency and metallic currency, in their effects on national industry. But the Secretary has not merely urged what is sound and good; so far as Congress has left it in his power he has *done* it. We have already remarked that the ratio at which he has reduced the national debt has surprised the most profound political thinkers of Europe; it may fairly be doubted whether the most sanguine of his countrymen—even those who know most of political economy—really expected so large a reduction in a year, as he has made. It is needless for us to give the figures; our readers are sufficiently acquainted with these from the newspapers, and they are aware that it is not our habit to offer them information with which they are already familiar. We will, however, place upon record what has been accomplished in two years; quoting, as follows, from the official "Statement of the Public Debt of the United States," on the 1st of September, 1867:

"Debt, less Cash in Treasury, September 1st, 1865..	$2,757,689,571 43
" " " 1st, 1867..	2,492,783,365 05
"Reduction....	$264,906,206 38"

What other Minister of Finance in the world has been able to present such a record, under similar circumstances?—in less than two years after the close of the greatest civil war the world has seen. No such results have been accomplished under the most favourable circumstances by the great statesmen of England or France. Nor can any unprejudiced person carefully discuss the subject without admitting that the gentlemen who have had charge of the government loans

have acquitted themselves of their important duties in a faithful and creditable manner. The greatest of kings and emperors would have appreciated a Minister like Mr. McCulloch; not only would they have conferred on himself the highest honours; they would also have rewarded the sturdy Agents who have given him such efficient aid in his great work. But will the great Republic evince similar gratitude? Nay, has it not already begun to sneer and abuse, instead of offering rewards?

ART. IV.—1. *Lafayette et la Revolution de* 1830 ; *Histoire des choses et de hommes des Juillet*. Par B. SARRAUS, jeune, 1833.

2. *Memoirs, Correspondence, and Manuscripts of General Lafayette.* Published by his Family. London, 1837.

3. *Memoirs of Gilbert Motier La Fayette.* By Gen. H. L. VILLAUME DU COUDRAY HOLSTEIN (Peter Feldman). 1824.

IT is a strange fact that the man who has entrusted to two nations the grateful task of taking charge of his fame has not yet found a biographer. Not one of the books named above is readable, except by that unconquerable class who can plod through large volumes of private correspondence, and whose mental digestion takes kindly to literary sawdust. Two hemispheres witnessed the exploits of Lafayette; for more than half a century he led an active, famous, dramatic career; born in one country, trained in another, he presented in his character a rare and admirable mingling of the traits of two different nationalities; starting at the top of the wheel of fortune he made a complete revolution, passing through every vicissitude of success and of misery. A life so long, so chequered, so interwoven with scenes, unsurpassed, perhaps unparalleled, for exciting interest in the world's history, has strangely escaped the pen of the biographer—certainly not for lack of tempting material, but, possibly, through overwhelming excess of it.

The brief memoirs, or rather notes, which were written by Lafayette himself, at the solicitation of friends, serve as a series of milestones, scattered through three volumes of correspondence. They give a not unamiable, but rather amusing picture of an ardent and fanciful boyhood. Cer-

tainly, never was there born a more thorough Frenchman. One cannot read, without a good-natured smile, those burning, nervous, rather egotistical sentences. Even in childhood he was conscious of often producing unpleasant impressions, by reason of his habitual silence, when he did not think the subjects canvassed were worthy of discussion; he indulged in a simplicity of manner ill-adapted to enjoying the gay pleasures of the court circle, though how, at so tender an age, he could mix in such fashionable throngs, he does not explain. But he was in everything in advance of his years; for he was a married man at sixteen. His memory runs not to the days when he was not enthusiastic for anecdotes of glorious deeds, and had not formed an infantine resolve to travel the earth over in search of fame. When he was only eight years old he took daily walks, in the earnest hope of encountering a hyena, which had brought terror and destruction into his village. Fortunately, for the juvenile hero, this ferocious ambition was not allowed to be consummated by a fruition which would, doubtless, have robbed both France and America of one of their most honourable names. At college he found only one obstacle to faithful study, and that was the desire to study without restraint. Fortunately, as he says, a gentleness of disposition preserved him from meriting chastisement, which could not have been safely inflicted, and he passed through the customary curriculum with no serious mishap. But he narrates, with undisguised joy, a little rebellious act, when, being bidden to describe a perfect courser, his spirit led him to discard all hopes of winning the offered prize, and he depicted in his most glowing language the steed who, upon the sight of a whip, throws his rider. Such little reminiscences he details with evident pride, yet with a most fascinating simplicity of satisfaction; and they are invaluable, for they draw an unrivalled picture of the fiery, self-confident, impulsive, and brave boy. Surely no more perfectly typical little Frenchman ever strutted his small hour on boyhood's mimic stage. We can almost see the childish heart swelling with large day-dreams, and hear the voice, not yet arrived at manhood's hoarse estate, talking energetically of "*la gloire!*"

But the French character, even in its most perfect developments, is irregular and imperfect. It is a strange jumble of great virtues and great faults. The more showy and magnificent qualities arrive at a wondrous growth; those which are more solid, but less externally attractive, are

apt to be stunted. To judge from the few but picturesque tales of Lafayette's boyhood, he was cut by nature upon the genuine French model. But a high destiny awaited him, and it was necessary to prune the too luxuriant virtues and to carefully foster and rear those which promised a less vigourous expansion. It seemed as if it was to this end that a superintending Providence planned his American career. He entered upon it young, fervent, and sympathetic, and, therefore, peculiarly impressible. While it lasted he saw exercised and brought to high perfection those characteristics which he would in vain have sought in his native land—a stern appreciation of substance, and an utter disregard for show; legislators seeking only that which was practica, uttering addresses and proclamations in plain and unpretentious language; passing strong laws and stubborn resolves, but in a quiet matter-of-fact fashion; warriors animated by no visions of fame, seldom, if ever, speaking of "glory," content to lead small and ragged armies of raw recruits, passing from defeat to defeat but undiscouraged; relying on no applause of their countrymen, much less of foreigners; totally destitute of all factitious support, but sustained solely by a grim resolve never to yield, and a perfect conviction of the righteousness of their cause. These traits, which in his native land he might have sought for in vain, he now saw developed in such noble shape that he could not but fervently admire that which also possessed the charm of novelty. Thus virtues were engrafted on his own character, and nascent qualities were nurtured into strength; and these, amalgamating with those other far different virtues and qualities wherewith nature had so generously endowed him, resulting in an unusual approach to the ideal type of a national leader and political reformer.

The family rank of Lafayette gave to his acts an artificial importance, and he was obliged to resort to artifice, and to escape from France by stealth. He arrived in Philadelphia at a time when foreigners were in rather poor favour with Congress, which had been irritated by the pretentious claims of men whose self-esteem led them to seek among a new and inexperienced people that appreciation which they had very deservedly failed to meet in Europe. Lafayette bore no tokens which at his first introduction could single him out from this herd of adventurers, and he was met with the cold statement that no rank or command could be allotted him. Controlling such disappointment as this rebuff inspired, he

answered boldly and promptly that he had risked fortune, liberty, and the displeasure of a despotic government for the prospect of aiding the American cause; and upon these credentials he claimed, as a right, permission to serve as a volunteer at his own charge. So unusual a spirit attracted kinder notice. A rank was given him. He went at once to camp, and was there straightway taken into the family of Washington—a happy and a fortunate event for all concerned. A friendship of unwonted ardour sprung up between them. Its growth was as sudden as the mushroom, but as sturdy as the oak. Indeed, it was in many respects peculiar, and deserves careful study, for it is perhaps the only existing exponent of certain fine traits in the character of each of these men. It seemed to burst forth in the bosom of the youthful Frenchman with such impetuous ardour as to betoken no long continuance, yet it endured and waxed greater year by year. On the other hand, Washington was so chary of any demonstration of affection, so slow and cautious in giving his full heart to any man, that it seems a miracle to behold how that stately citadel was stormed and forever after held unchallenged by Lafayette. In the long years of trial and the longer years of separation, during all which both these friends were in active, public life, not one shadow of public or private suspicion or jealousy fell ever so faintly across their love. The letters of each to the other show them in the most amiable and most honourable light. Those of Lafayette are like the warm billets of a lover to his mistress in their expressions of attachment, like those of a most dutiful son to a most revered parent in their respect and deference. They are a perfect picture of the young man's heart, and a very loveable heart it is too; he would be too impulsive to conceal anything even if he were not too ingenuous to desire it. He pours out his troubles and seeks for sympathy and comfort from his great master, as a girl might do. Every annoyance and vexation is told, and with evident relief to his overburdened spirit. His letters were written in English, and, save a certain quaintness of expression, which is rather odd and piquant, they show an excellent mastery of the language. The replies of Washington are no less pleasant to read. They are written with much more of geniality and much less of stateliness than mark his usual correspondence; in them the formality of that age, to which no man more scrupulously adhered, is for the time laid aside, and is superseded by a friendly and confiding warmth; they abound in

unusual expressions of tenderness; and they show a remarkably keen insight into the character of his friend, and a perfect tact in appealing to his mind. The delicate and skilful touch with which the great commander sometimes finds it necessary to heal the quick and susceptible spirit of the eager youth; the restraint, so powerful yet so gentle and almost imperceptible, which he exercises over his impetuosity, are traits which we should hardly expect to find in a warrior, and which, good and noble as we all know Washington to have been, yet throw a gentle radiance of additional beauty round his character.

Of strategic ability Lafayette showed an amount which would have been creditable to an old and experienced officer, and which in one so young was really extraordinary. Of the instances of this, however, it is not our purpose to speak here. But of certain matters in which he displayed a self-control, in a manner peculiarly honourable, we ought to say a few words. When the Gates and Conway cabal was driving on with much vigour and apparent success, and the machinations of those contemptible men, who wished to rise by placing their feet upon the neck of Washington, seemed on the point of effecting their object, it was deemed very desirable to seduce Lafayette, who, by his personal rank and importance in France, and even much more by his own ability and merit, had arrived at high repute, both with Congress and in the country. But the intriguers had a very superficial knowledge of Lafayette's character. They duly considered his youth, his vanity, his love of distinction, his ambition. But they made a great error in failing to recognise the existence of powerful balance-wheels, which kept these weaknesses within bounds. They secured to him the dignity of an independent command. They planned an expedition from Albany into Canada, and talked loudly of burning the British shipping on Lake Champlain, of taking Montreal, and reducing the northern country. They drew a brilliant picture of a series of dashing exploits; and the hero and the leader was to be Lafayette. But the toils were not so artfully spread but that the game saw and eluded them. Lafayette was exceedingly indignant at this covert and insiduous attempt to allure him from his fidelity, which, being based upon an assumption of his dullness, or his weakness, or both, was in fact an insult. But though he was angrily resolved to disappoint the conspirators, yet, at the advice and solicitation of Washington, he determined to seize

the prize which their folly held out to him. Delicious visions of distinction danced before his mind's eye. He wrote to France that he was on the high road to glorious achievements; and the same report was bruited also by many parties in America, who, for various reasons, desired it to be widely known, with such a mighty flourish of trumpets did he enter upon the business. What, then, was his chagrin and mortification when it turned out to be little better than a hoax. Neither men nor money were provided for him except in the most meagre amount. It was evident that he had been trifled with; his just wrath mounted high. But, beyond the disappointment, there was the fear of ridicule and disgrace in Europe, even more than in America. His mortification was excessive. He wrote touching letters to Washington, pouring out all his sorrows and his trials. He bewailed his unhappy absence from his beloved commander with a fascinating warmth and simplicity; in a melancholy tone he mourned over the loss of reputation which he deemed inevitable. He owned that he was tempted with the means at his disposal to make some desperate dash; the insufficiency of the provision for the undertaking must then appear. He might do something brilliant; he would at any rate do something brave. The cause might suffer, but his reputation would be saved. But the voice of duty bade him quench these thoughts, which, though temptations to a breach of duty, were yet not devoid of reason, and to one of his temperament must have appealed with a mighty strength. The struggle was a cruel one, yet he never really wavered. He had before him the serene magnanimity of Washington, who was almost daily encountering and brushing aside, like cobwebs, similar snares. But this was the peculiar strength of Washington's character; it might be fairly expected that it would prove the peculiar weakness of Lafayette's. Yet the young man triumphed. And though this self-control has received but slight notice, it was a test of character, which a wise judge would have valued more highly than any other act in his American career, as an indication of the power for future deeds that was in the man.

One other not inferior act of similar noble forbearance ought to be narrated. In preparation for what proved the closing scene of the war, at Yorktown, Lafayette had been detailed to watch, harass, and decoy Cornwallis, according to his own best ability and discretion. Cornwallis despised "the boy," but was nevertheless outwitted by him, and was

at last skilfully entrapped in the peninsula of Yorktown. An engagement between the French and English fleets left the former master of the adjacent seas. De Grasse blockaded the British army by sea; Lafayette beseiged it by land. The Englishman was evidently almost strangled, and it needed only to make the clutch a little faster. The French admiral was all impatience to conclude the business and be gone elsewhere. He urged Lafayette with all the arguments he could command to draw his lines closer and strike the final blow. His words were plausible. Success, though not certain, was yet probable; too probable for any fault to be found, even if the operation miscarried. That this would be the conclusive stroke was evident to all careful observers. The glory to be won was immense; the temptation might well have seduced an older head and a less ambitious spirit than Lafayette's. But again he showed the same perfect self-control; the persistency of the French admiral, backed, doubtless, by secret whisperings within, was met by an equal persistency on his own part. He waited for Washington to come; he waited in order that probability might be reduced to certainty. Even at the expense of much fame to himself, he waited—oh, rare friendship in public men!—he waited in order to allow Washington, who had fought the war through, to have the honour and glory of striking the last grand, fatal blow, to see which the eyes of the whole world were turned towards America. It is impossible to praise too highly these acts. We are surprised to see violent attacks, upon what would reasonably seem the weakest points in his character, met and repulsed with the calm resolve of one grown old in self-restraint and long trained to resist temptation, We see the most magnanimous honesty in friendship where history would teach us the melancholy lesson to look for selfishness at least, and too probably for inimical jealousy and mean subterfuge.

It has been universally conceded, by respectable writers of all parties writing since the beginning of the nineteenth century, that the conduct of Lafayette in the French Revolution was in the highest degree honourable and reasonable. At the time he met the usual ill fate of a moderate man in times of extreme excitement. He was a mediator between two combatants, and received hard words and harder usage from each. Neither were his efforts attended with success, nor did his partisans meet with anything but failure, confusion, imprisonment, and death. But in the French Revolu-

tion it was more honourable to be slain than to slay; more creditable to be overborne by the bloody torrent than to ride aloft upon its waves. The first movements for a reform of the frightful mass of abuses which ages of despotism had engendered met, of course, with the warmest approbation of the warrior of liberty. It was, indeed, Lafayette himself who sounded the first cry of battle when he boldly demanded the convocation of the States General. A timid man would have heard in these words only his own death-knell, but from these unterrified lips they pealed like the tocsin of freedom. He watched, urged, and shared with ardent pleasure the successive steps taken under the leadership of men of the highest talents and the purest character. Slowly and steadily the ancient dam, in which were firmly cemented the huge blocks of conservatism, royalty, aristocracy, wealth, privilege, and office, was overflowed, undermined, bent, and swept away, piece by piece, before the steady, unintermitted pressure of men who resembled, in inflexibility and integrity, Pym and Hampden in England, Washington and Adams in America.

When, at the organization of the States General, discussions and dissensions separated that body into hostile factions on the question of qualifiactions—when the nobility, the clergy, and the *tiers-état* constituted three distinct and discordant elements, Lafayette, with a few others, had the magnanimity to act up to the principles which he had advocated so strenuously in theory all his life. He then declared himself ready to sacrifice all those hereditary advantages which the *ancien régime* attached to his high birth. He abandoned those brethren in nobility who were resolved to stand fast by their old exclusive aristocratic privileges; he joined the great body of the third estate, and cast in his lot with the representatives of the bourgeoisée. At the outset he took this position, and it was that to which, through all turns of weal and woe, he clung till it carried him into the stern dungeons of Olmütz. When he first took this position, it was in the very front wave of revolution; but the current flowed rapidly on, and soon the angry waves foamed about him on every side, and he stood in the very midst of the triumphant people; but as he was stable they were in rapid motion, and they soon passed him till, as the days of the reign of the Jacobins dawned, he was looked back upon as a land-mark midway between the ancient royalty and the existing sans-culottism. With the first triumph of the re-

formers, all eyes turned upon him; not only did his sacrifices so liberally made demand a generous reward, but there was not in France a man who could show such a record in the cause of liberty as he; there was not one in whom the great middle class—those men of intelligence and probity who dreaded equally despotism and the anarchy of mob rule—could repose such confidence as they could in Lafayette. Accordingly, so soon as the march of events put two noble gifts in their hands. the mayoralty of Paris and the command of the citizen guard, they appropriately conferred the former upon the venerable and virtuous Bailly, the latter upon the tried and intrepid Lafayette. It was a high but not an undeserved tribute to his abilities and character.

This was the result of the first outbreak of any great degree of violence—that which had shown the court party beyond a doubt that it behoved them to make some concessions to the spirit which was abroad among the people. For a time there ensued comparative tranquility, and only politicians struggled; theories were the battle grounds and speeches the weapons. By degrees skirmishers deployed in advance of the positions assumed by Lafayette and Bailly, who had appeared at first to be the very leaders of the vanguard. They represented the great middle class, and relied upon that for support; but there was a vast substratum beneath the middle class, which was powerful in a mighty brute force, which was already muttering, and which, like a volcano on the eve of an eruption, gave presage to the coming event by ominous rumblings and occasional suppressed commotion. There were men, very honest and respectable, and who did not yet see the *debouchement* of the dangerous road they were travelling, who were inclined to find their support in this lower class, and to demand that the revolution should go a step farther and do something for the benefit of these men who had thus far been comparatively unaffected by the agitation and reforms which had all been bruited and accomplished in a region quite above the heads of the people of the lowest fauxbourgs. But as yet these were only omens; the day of these men had not actually come; the occasional harangues of their few spokesmen were productive of little or no effect, and the real struggle seemed to be between the advocates of the old despotic royalty and those of the new theory of the constitutional monarchy. The intention of these latter was to preserve the title and position of king, but to surround the throne with free institutions.

And as the latter party worked steadily into the ascendancy, tranquillity seemed about to become permanent, and ordinary sagacity would have dreaded rather the machinations of the conservatives than the possible plots of leaders of the mob.

While matters lingered at this stage, and after the creation of the national guard, and the high honour done to Lafayette in placing him in the command-in-chief, no man could have felt more justly proud and happy than he. Apparently, after aiding in giving liberty to America, he had been enabled to become one of the chief instruments of bestowing the same invaluable boon upon his native land. The sky was certainly not absolutely cloudless, but the bright sun of freedom promised soon to burn off the petty flecks upon the blueness. The king seemed honestly willing to recognise and yield to the inevitable spirit of the time and the nation; he was willing to stifle his regrets and to accept the position of the constitutional king of a really free people. Some discontented nobles and conservatives formed a faction inconsiderable in numbers and force, requiring for a while to be watched carefully, until, like the Jacobites in England and the Tories in America, time should show them their helplessness, and soothe the asperity of their indignation; but the commander of the armed and enthusiastic thousands of the national guard, with the king upon his side, needed not to dread the discontented remnants of the nobility. Neither, on the other hand, did any one yet dream of the bloody era of the Reign of Terror. Isolated outbursts of pauper savagery showed (what was natural) that the vicious element, the *canaille*, would like to see a season of anarchy with all its attendant attractions; but the frightful power of the ferocious populace was not so much as guessed at. These inevitable accompaniments of the most pure and perfect revolution were to be anticipated; but, with careful watching and tender appliances, it seemed that they needed not to be feared; and the sanguine spirits of upright disciples of a noble and reasonable freedom, hoped for a time that their heads had directed, and their hands had executed, a stupendous revolution, by which the despotism of ages had been superseded by enlightened liberty, and no disastrous national convulsion, no cruel and long-drawn war had been requisite to this glorious consummation. Fair hopes! to be so miserably crushed!

The popularity of Lafayette was wonderful. The trust of the people in him was unlimited. His name was a caba-

listic word with which to quell their wrath. His presence awed them into quiet and decency. On the frightful night when the mob visited Versailles, this power of the undaunted man was shown. The king was not, or at least not yet ostensibly, false to his new position. His assailants on that night were a mass of the lowest and most brutal populace of a capital unrivalled for its capacity in this respect in all Europe. At the risk of his own life, Lafayette brought Marie Antoinette on to the balcony in presence of the surging sea of debauched, drunken, murderous faces, upturned to revile her, and there kneeling, with exquisite and courageous gallantry, he kissed her hand. The dramatic sense of the frantic Parisians was touched. They burst into a demoniac howl of applause. The faultless tact of Lafayette in this mortal crisis had saved the life of the queen, who, ever after, rewarded him with nothing but unrelenting hostility. This time the spectre of sans-culottism quailed and sank before his noble reproach. The next time, at the Champ de Mars, it did so more reluctantly, and not until the persuasion of volleys of musketry had been added. It began to appear that the men of the people had had their day, and that the men of the mob were to succeed them. This new element of hostility, superadded to the mistaken wrath of the queen, proved too strong for the bourgeois party; and when Lafayette resigned the command of the national guard, and Bailly resigned the mayorality, the constitutionalists, who wished to place Lafayette in Bailly's place, were outnumbered by the unnatural and suicidal alliance of the court with the more extreme revolutionists. Thus, for a time, Lafayette was removed from the tumultous arena where the confused struggle waxed daily more unreasoning, more furious, more bloodthirsty, and, for a time, he was left to contemplate, as a simple citizen, the terrible turmoil and the dangerous current, raging with increasing violence towards the awful vortex of the Reign of Terror.

The combination of Pilnitz, and the marching of the allied forces, next called him from his retirement to place the resources of his military experience at the service of his country. He was placed in command of one of the three grand armies which revolutionized France, opposed to the invaders, whose basis of hostilities was the resolve to restore the ancient order of things. But, while in this position, he brought to bear all the knowledge which he had reaped in his American campaigns, and sought by assiduous drilling to train his raw battalions

to some degree of military discipline, affairs at Paris were fast coming to an evil pass. The demagogues had almost superseded the first class of honourable reformers. The ignorant and ferocious populace was already ousting, terrifying, and controlling the moderate middle class, and substituting violence for the salutary changes which had lately appeared to be so happily effectual. Lafayette watched with increasing pain and anxiety the threatening march of events. It was long since he had begun to feel uneasy; he was now thoroughly shocked at the formidable power of the club of Jacobins, daily growing, and with its growth also tending more and more towards anarchy and universal licentiousness. There was imminent danger that, instead of a free and noble government, a despotism of ignorance and ruffianism would be established. In his dread, Lafayette penned a strong and bold letter to the Legislative Assembly. In it he deprecated the present tendency of affairs in Paris; and he even had the audacity to name and denounce, in unqualified terms, the Society of the Jacobins. This letter was written in perfect good faith; yet coming, as it did, from a general at the head of a large and devoted army, it gave an opportunity, of which his enemies eagerly availedthemselves, to asperse his motives, to impute the most unprincipled aims, to nick-name him the French Cromwell.

Yet there is no doubt that the writing of the letter was perfectly proper. We, who have the subsequent scenes of the drama before us, by which to guide our judgments, who can learn from the long life of Lafayette his perfect disinterestedness, his unsurpassable integrity; we who know the history of that melancholy period of irreligion, that frightful era of bloodshed, which was inaugurated by those whose first wicked steps his vigilance detected and exposed—we may well think that the writing of that letter was one of the most sagacious and manly acts of his whole life. And, on abstract principle, it is no less justifiable. In times of great political upheavals, of vast national reforms, there are certain men who are the leaders, the counsellors, the guardians of the movement, and of the less able masses who lend to it their irresistible weight; such men are bound to watch with the anxious manners of pilots in troubled and dangerous seas; it is their duty to restrain as well as to lead; to warn as well as to incite; to soothe as well as to rouse: to preserve discipline and quell anarchy; to countenance virtue, and to use every honest means to expose and thwart the plots of the

selfish, the mischievous, and the dishonest. But this part has never yet been successfully assumed; perils beset it on every side. Lafayette, who entered upon it with all possible honesty, was too conscientious to apply force, and he was overwhelmed. Cromwell and Napoleon, however honestly they may have begun, saw no way out of their critical position, save through the tempting portal of despotism. From the position which Lafayette had held from the very beginning of the popular movement, he owed it to his countrymen to write this letter. Seeing as he did signs of the tempest which was brewing just below the horizon, he must have been either false to that career to which all his past acts and words had irrevocably pledged him, or he must have been overcome by a selfish fear of possible consequences to himself, had he not publicly forewarned the nation of that which he read in the skies. The journey which he took to Paris shortly after on the same errand, when he hoped to be able to destroy the club of the Jacobins, and to wall up the doors of its rooms, is justifiable upon the same principle. He had made such dispositions in his department, that it was impossible that any military movement could demand his presence during the brief period which would be required for his sojourn in the capital. His letter had been ineffectual, and he must try what he could do by his personal presence, or else he must give up the entire matter in despair. At Paris he found his popularity gone; or at least he found that respectable class, who were wont to honour and admire him, stricken with the palsy of fear, and a lower class, who were unable to comprehend him, either intellectually or morally, acquiring such dominance as made them bold to revile and threaten him. There was certainly nothing Cromwellian in this visit; on the contrary, he put his life in much peril by it; he came alone into a city, where a few weeks later it would have been certain death for him to be seen, where even then he was in momentary danger of assassination. He came not to overthrow, but to maintain; and he depended for his power to do so on nothing but the convictions of the people. But he had miscalculated the velocity with which the Revolution had been moving; he had been long since outstripped in that mad race. His voice no longer gave the law to reverent masses. The hour had not quite come when his public condemnation could be obtained; but each fast-fleeing day gave additional proof that that hour was drawing rapidly near. With a heavy and foreboding heart he turned his back upon

Paris, and hastened to rejoin his army. "This," says Miguel, "was the last symptom of life in the constitutional party." On the eighth of August following, the opponents of the constitutionalists had made such further progress that they ventured to accuse him in the Assembly; but he was acquited; those, however, who voted in his behalf, were subjected to every species of contumely and insult by a disappointed and angry mob.

Then quickly followed the terrible outbreak of the notorious tenth of August. Blood-stained rioters dictated law to the Assembly. The royal family barely escaped with their lives, and were soon immured in harsh captivity in the Temple. The Reign of Terror had its bloody inauguration, and sans-culottism was baptized in the thick gore of its victims. Lafayette thrilled with indignation and horror. His first impulse was to use his army, which was devoted to him, to quell this terrible eruption of brutal fury. But the public enemy was before him; his colleague, General Luckner, after some days of indecision, refused to second him. The attempt promised only the addition of another element of discord and bloodshed. Lafayette felt it his duty to abandon the design. He knew now that his hands were helpless for good; nay, that if he fell into their clutches, he would not even be allowed to exist to see the utter destruction of the fair fabric which he had so lately thought that he and his compatriots had erected and presented to their grateful countrymen. The same land could not hold Lafayette and Robespierre. It behoved him to stay and abide a death which must be useless to freedom, and would only add another crime to the frightful record of her oppressors, or else to flee ere it was yet too late. He chose the latter sad alternative; he resolved to expatriate himself. At the same time, however, regarding before himself that country which no longer afforded him even the bare protection of his life, he would not take one soldier from his army away with him; he would not rob France of one defender against the foreign host. He made every prudent disposition to guard against any disaster arising from his departure, and then, at last, set swiftly forth for the frontier. A few personal friends, shunning the same perils which beset their leader, accompanied him. Here is what he himself afterwards wrote from his prison at Magdeburg, in relation to this act of his life:

"Ah, sir, I am sensible of what I owe you for your consideration of the inexpressible grief which my heart, ardent in the cause of humanity,

thirsting for glory, loving my country, my family, my friends, must have endured when, after the labours of sixteen years, I was obliged to deprive myself of the happiness of combating for the principles and sentiments for which alone I have lived. But what more could I do? You know that, at the 10th of August, I was the last, and almost the only individual that resisted. If intrigue misled many citizens, terror chilled almost all. I was dismissed, accused, that is to say, prosecuted. My defence might have been sanguinary, but it would have been useless. It would only have served myself, not my country; and the enemy would have taken care to profit by it. I might have attacked and been killed; but seeing no military advantage in that, I desisted. I would have gone to meet death in Paris, but I feared that such an example of popular ingratitude might discourage other friends of liberty hereafter. I departed, then, and there was the more reason for secresy that a great number of officers, and even several corps, might, at such a moment, have been induced to follow me."—*Sarrans*, i., 83.

This flight unquestionably saved Lafayette's life; yet it led him into such a series of indignities and sufferings that, in the following four years, he must often have felt that a death by the guillotine would have been better encountered than shunned. Arrived at the Austrian advanced posts, the exhausted fugitives were arrested. In vain they appealed to the acknowledged law of nations. Their capture threw the commanding general into transports of glee. "To torment one of the first friends of the revolution," says Thiers, "to have a pretext for imputing to the revolution itself the persecution of its first authors, and to behold the fulfilment of all its predicted excesses, diffused general satisfaction among the European aristocracy." Lafayette was tantalised by an offer of his freedom, if he would deny only his previous expression of opinion on the subject of the abolition of the nobility. It seemed a small matter to make this recantation of a single minor point, especially when the pressure which wrested it from him would be as widely known as the retraction itself. But the high-spirited man not only refused to yield, but even threatened, if any such recantation were falsely put into his mouth and reported of him, that he would, in the most public manner, avow his unaltered conviction. This constancy sealed his miserable fate. He was handed over to the evil guardianship of the Prussian court, and was immured in the darkest and dampest dungeons, which despotic malignity had constructed to prey upon the bodies and souls of its victims. As he passed through the four grim doors which led to this awful den, it seemed as though the world were shut out from him for evermore, no less irrevocably than if the tomb itself had closed over him.

Later, when Prussia was driven into peace with France,

the unrelenting enmity which the king bore to him led that monarch to avoid the necessity of setting him at liberty, by the meanness of transferring him to the custody of the Austrian emperor. That potentate, forgetting that Lafayette had perilled his own life to save that of Marie Antoinette, grasped the proffered captive with a villainous joy, and plunged him into a wretched cell at Olmütz. The comrades of his flight went with him, but they were not accorded even the slender gratification of each other's society.* We do not intend to detail the barbarities that were practised upon these prisoners during this captivity; suffice it to say, that they were all which Austrian ingenuity —more clever in this than in most other matters— could devise. Lafayette was cruelly allowed to know of the bloody proscriptions in Paris, but he was not allowed to know even whether his wife and children were still alive, until that lady made her way to Olmütz, where she was allowed to share, in a measure, his confinement. The Austrian government clung to him with the tenacity of unutterable hate. The English court remonstrated; Washington, then President, wrote an autograph letter and sent a special minister to intercede for his old friend—it was all to no purpose. The emperor was utterly deaf; and when, finally, at the treaty of Campo-Formio, Napoleon made the release of Lafayette and his comrades, a condition precedent to signing, the Austrian ambassador descended to the most petty lying to avoid the unwelcome necessity, and nothing but the most abject fear wrung it from the court. The conduct of Lafayette during this trying period, when his mind might well have been affected through his body, seems little less than miraculous. His spirit never relaxed. His soul and his intellect stood bravely by the brave man. He never seemed even to admit the possibility of wavering in any opinion which, under happier auspices, he had been led to utter. He was as true to liberty through the whole of that horrible captivity, as when he was the venerated leader of the national guard; and letters, covertly written by the help of soot and a toothpick, scarcely spoke of his own condition, but breathed the same ardent devotion to liberty, the same unalterable principle which had marked the days of freedom and of triumph in the past.

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* Memoirs, i., 93.

The state of public affairs in France, for a few years following the treaty of Campo-Formio, was not such that Lafayette felt himself able immediately to return. His secretary, M. Sarraus, tells us that he felt that giving his adherence to the decisions of the eighteenth fructider, would be an act of weakness; further that he felt it a sacred duty of gratitude to cast in his lot, with that portion of the government and councils who had assisted materially in procuring his release, and who had just been proscribed and banished. He accordingly remained in exile, dwelling in Holstein and Holland till the news of the proceedings of the eighteenth brumaire reached him, when, in an outburst of joy, he hastened back to France without even writing for the preliminary precaution of having his name stricken from the proscribed list. After his return Bonaparte made approaches to win him, if possible, to his party. It was not that the successful and self-confident young conqueror felt any dread of the man whose freedom was his own proud gift, but he would fain have acquired the advantage of using an honourable and respected name; he would have been glad to enroll among his supporters one whose record was pure, and whose past career had been at once famous and unblemished. But he felt no necessity for Lafayette, whom he regarded as the remnant of the past order of things, a man whose name was useful to government, rather as an antique ornament than by reason of any practical benefits likely to accrue from it. When, therefore, Lafayette sought for guarantees for the public liberty as a condition of precedent to assuming any part in public affairs, or to giving his endorsement to the present policy, Bonaparte was vexed, but not very seriously annoyed. Without opposition, or any demonstration of enmity, he allowed Lafayette to retire to his country-seat; and thereafter he contented himself with manifesting his displeasure by the simple expedient of steadily refusing to grant to Lafayette's son the regular and customary promotions in the army. For a long period ensuing, Lafayette's life was passed tranquilly in the rural seclusion and domestic pleasures of his country estate of La Grange. He became a country gentleman, and transferred his labours from the affairs of state to the business of his farm, where he dwelt in a sort of patriarchal simplicity.

In time he came again to take some small part in political affairs, but his general privacy was regarded as a tacit protest against the existing government. When the question

of conferring upon Bonaparte the consulate for life he voted in these words: "I cannot vote for such a majesty until public liberty has been sufficiently guaranteed. Then I will vote for Napoleon Bonaparte." But when, in the course of events, Bonaparte was hard pressed by the coalition of the European monarchies, Lafayette was willing, for the exigencies of the special occasion, to bury his private objections. He saw, for the time only, France, and foes of France. He cast all his energy into the scale of his country, and lent all his aid to the great warrior who fought against invasion and subjection; and disregarded for the time the fact that that warrior was a ruler upon despotic principles.

For a short period after the battle of Waterloo, Lafayette continued in public life the advocate of free and liberal measures whenever it was possible to make his voice heard in their behalf. But in 1823 he was kept out of the septennial chamber by the Villelle ministry, which hated and feared him. In 1824 he received the most urgent solicitations to visit once again the country of his youthful fame and his first enthusiastic love. The flattering request touched him too tenderly to be refused, and on the 25th of August he landed in New York. Many readers of this Review will remember the excitement and enthusiasm which hailed his arrival and his progress through the land of his adoption, so changed since he had last seen it, that he could not have recognized it as the same. The period of his stay was crowded with every species of public rejoicing; everywhere he was greeted with popular outpourings, processions, holidays, civic and private banquets, speeches, and every demonstration of esteem and affection which the ingenuity of man has devised for paying honour to those whom the people love. But it is no part of the design of this article to enter upon a detailed description of this magnificent progress. Neither can we dally to draw a picture of the rural life to which he returned in his native land, but we must hasten to recount his part in the Revolution of 1830, when, for the last time in his long and active life, he appeared the guide and controller of the liberty-seeking nation.

In 1828 he was again summoned to take his part in national affairs. He was now an old man. A half century of activity, anxiety, and hardship had not failed to leave its impress upon his physical powers. But no exhaustion was able to enfeeble his well-balanced intellect, and while this remained to him it was ever ready at the call of his country

and of liberty. The veteran answered bravely to the summons of electors of his department, and took his seat in the septennial assembly, where age seemed rather to have increased than diminished his wonderful vigour. Every subject of liberal legislation still found in him its potent advocate; every project of internal reform was warmly pressed by him; every foreign struggle for liberty had his voice raised in its hearty commendation and support. At home he sought to accomplish the abolition of capital punishment and of the brutal degradation of the branding iron; to secure more honesty and efficiency in the subalterns in all departments, into which neglect and venality were fast insinuating themselves; to bring about a perfect legal equality of creeds and religions; to institute an effective and liberal system of popular education; to extend the elective franchise to all taxpayers; and to forward a number of other similar reforms and improvements. His foreign policy he described with boldness and simplicity in the following words:

"Besides, gentlemen, my system of diplomacy might appear to you too simple. In the great contest of the East, all that I can see for France to obtain, is the importance of our intermediate power. In what is called the balance of Europe, I can only see two parties: the oppressors and the oppressed. In the demarkation of States, I can only see their natural limits; in the well-being of the people, I see nothing but the advantage of all, and in French politics nothing but an independent and liberal part. You are acquainted, gentlemen, with that vast and powerful league which would enslave and brutalize the whole race—it devastates the Peninsula, oppresses Italy, and disturbs all other States. Its metropolis is Vienna, and, in spite of all other pretentions, Don Miguel is its ideal type."

In advocating such measures and such a policy, Lafayette busied himself, whilst with all the rest of his nation he was drifting with an impetus daily increasing, but appreciated probably by no one, towards the Revolution of 1830. The Bourbons steadily diverged more and more widely from the course marked out by the sentiments of the people; every step brought them nearer to the system of the *ancien régime*. The nation saw with alarm that an absolute monarchy was rapidly developing and strengthening itself. All eyes turned towards Lafayette. At the end of the session he journeyed through several rural provinces to Lyons. Everywhere he was met with the enthusiastic outpouring of the whole people. At Lyons itself the demonstration was most imposing; the authorities rightly judged that it would be far from welcome to the court, and resorted to every safe expedient

to check it, but in vain. The popular enthusiasm knew no bounds.

The match which fired the slumbering train was the publication of the ordinances of the 26th of July—an audacious and reckless act on the part of the government, which, grown careless by impunity, seemed now to have been suddenly made mad by the gods, that it might be destroyed and fulfil the ancient saying. These ordinances pronounced the dissolution of the Chamber of Deputies before its meeting, reduced the number of deputies more than one-third, interfered in many material particulars with the rights of election and the privileges of electors, did away with the liberty of the press, with much more that was arbitrary and unconstitutional. This act was the suicidal thrust which the ill-fated Bourbons dealt themselves; they passed into outer darkness, and no one can now dream that even the ghost of "legitimacy" will ever again revisit the Tuileries.

At first the Revolution seemed only a slight *émeute*, which threatened no serious trouble. It appeared to be the rash, unseconded outburst of the wrath of a few hot-blooded young men. There was no appearance of concert; the mass of the citizens were too startled or too timid to join in a revolt. Charles X. and his ministers had learned some lessons, at least, from the past, and they had not entered upon a systematic counter-revolution without those physical aids and appliances and material precautions which are indispensable in such a human powder-magazine as Paris. Numerous and well-appointed troops shot and sabred the meagre mob without mercy. But the second day saw the masses of the people more awake to the facts around them; the insurrection gathered strength. Still it seemed that this could only lead to the melancholy necessity of so much the greater slaughter. The Hôtel de Ville was the contested point, and was alternately won and held by the people and the troops several times. It was by slow degrees only that the insurrection gained ground upon royalty, and that the event of the struggle became clear.

With the first news of the publication of the ordinance, Lafayette made hot haste to Paris. On his arrival the deputies were holding troubled and informal meetings at each other's houses. Fear and anxiety clouded their brows. A terrible history taught them how fatal was an erroneous step in times of revolution. The crisis was present, but upon which side victory would declare, was a problem quite be-

yond their powers of solution, however keen might be their scrutiny. A wrong conclusion might very well cost a deputy his head. Indecision was a little, but only a little, less dangerous. Of the limited number who really knew their own minds, or, knowing, dared to publish them, the majority espoused the Bourbon side. This had design, preparation, disciplined troops, all the vast arsenal of power and authority at its back, and, so far as could be judged, the eagle of victory, if that bird ever appears in such ignoble contests, seemed to be just perching on their banners. The people, on the other hand, had neither concert, premeditation, organizations, or leaders. All these considerations, weighty enough with others, did not even enter the balance in the mind of Lafayette. With a few more, he boldly and promptly declared himself on the side of the insurgent people. From that moment they had the best of leaders, and a skilled organizer of insurrectionary movements. His adhesion was hailed with universal enthusiasm. His name was a tower of strength. The people met with no more repulses. The advantages of royalty seemed to evaporate before the bright sun of Lafayette's reputation. He was in the Hôtel de Ville, and the king was hurrying to Compiègne.

But so sudden and unpremeditated had been the Revolution; so thoroughly had it been the work of an angry people, rather than of leaders acting on a pre-established plan and for concerted objects, that now that it had gained securely the first step, the direction in which the second should be taken was clear to nobody. A government had been destroyed; but what authority should be set up in the vacant place did not appear. Lafayette held to the same conviction which he had cherished through life, and would have desired a republic, had the prospect seemed practicable. There was certainly then in France an ardent and energetic republican faction. It was composed of old men like Lafayette, whose conviction had been life-long, and of young men, whose creed was only a wild, impracticable day-dream. But its advocates, though enthusiastic, were few; and against it there loomed the ghastly spectre of that bloody republic which had once desolated the land. Lafayette felt with grief that it would be futile to urge that the bloodthirstiness of the demagogues who guided that mad tempest of revenge was alone accountable for all the crimes wreaked under the shadow of republican institutions. The evil associations with the name palsied reason and made argument useless.

A battle-cry, which made four-fifths of the nation shudder with mortal repulsion, was hardly worth shouting even though Lafayette himself should utter it. He recognized this fact; and respecting, though sorrowfully, the prejudice of the people, he contented himself with strenuously advocating a provisional government, until the primary Assemblies could be convened in the manner directed by the Constitutional Assembly, and could declare clearly the sentiments of the people.

But men more skilled in wire-pulling than Lafayette, less scrupulous in their regard for the popular will, more resolute in seeking to guide affairs in that channel which best suited their personal views and interests, were hard and artfully at work. Against their subtle contrivances the noble simplicity of Lafayette was quite helpless. The deputy, Lafitte, headed these busy partisans of the Duke of Orleans. Every artifice was used to place him on the vacant throne. The majority of the deputies were persuaded to favour his pretensions. They were men who had much at stake, and who dreaded disorder, and they were assiduously plied with threats, that this was the only refuge against utter disruption of the body politic. They represented eighty thousand of the most notable citizens. It was therefore argued, that their decision was the most correct indication of the will of the people, which, in this pressing crisis and emergency it was possible to obtain. Such reasoning appealed forcibly to Lafayette's principles. Further, the duke frankly gave him all the assurances and guarantees which words could express, or the occasion demand; and, doubtless, he spoke in perfect sincerity. Lafayette, anxious and half disappointed, felt himself thoroughly hampered by circumstances, and compelled to give his assent to the step of proclaiming the duke lieutenant-general, and to the rapidly succeeding step of declaring him king. On both these occasions the duke spoke to Lafayette so fairly, that the open-handed and honourable patriot could not do otherwise than express himself satisfied that the new dynasty would prove true to the principles of popular freedom in which it was founded, and to the strong love of free institutions to which it owed its existence. This endorsement from Lafayette was absolutely indispensable to the success of the Orleanists. Without it they never could have succeeded. Their project was far from popular with the men of the barricades, as they were called; that is to say, the men whose active exertions had

made the Revolution. These high-strung patriots were dissatisfied and suspicious. A smaller spark than a hostile word from Lafayette would have fired a train that would have shattered the prospects of the Orleanists quite as irremediably as those of the Bourbonists had just been shattered. But liberal promises, ingeniously spoken, had won the great oracle; and he publicly gave his adhesion to the new dynasty. There were many and loud cries of "Vive Lafayette!" Less numerous and less loud were the shouts of "Vive le Roi!" It was evident as the day that the new king owed his throne to the influence of his subject so beloved and trusted by the people. His elevation was the work of Lafayette's hands. For a time the youthful monarch was all fondness and adulations, and Lafayette was allowed to hold the well merited place of the first and most influential subject in the realm. But no position can be more dangerous than that of the servant who is greater, especially when he has shown the whole world that he is greater, than his master. The gift of a throne by one who is to remain the subject of the monarch, is a fatal act of generosity. It was not in human nature for Louis Philippe to love Lafayette with a perfect heartiness. For a short time all must be equitable and serene, unanimity and kind feeling must reign, or seem to reign. But the king grew more used to his position, the novelty, and with the novelty the sense of the precariousness, of the beloved dignity wore off. By degrees the early feeling of dependence upon Lafayette—the knowledge that he was an essential prop of the throne, gave way to self-confidence, and a sense of security. This showed itself in no flagrant dereliction from duty, or from the spirit of the Revolution, but in what seemed to Lafayette, and to those who thought like him, a timid and temporizing policy—a failure to meet boldly the exigencies of the time.

The great point of difference lay in the foreign policy. France had to choose and to declare whether or not she would undertake again to enter upon a proselyting career; whether or not she would lend her strength to assist popular uprisings in other countries, or whether she would rest content with preserving liberty within her own borders. There was, of course, a strong party who advocated the former course; love of glory and of war, and the haughty talk of the destiny of France, would have led many of the hot-brained into any extravagance. But the past had taught prudence to all who were capable of learning that lesson.

Disasters enough, bloodshed and expence enough, had been incurred in minding the affairs of other people, to lead the wiser statesmen to the conviction that, after all, the system of non-intervention was the true policy of the country. This wise and righteous doctrine was accordingly decisively proclaimed, but qualified by the important additional declaration that, nevertheless, France would not suffer any interference of foreign powers in behalf of despotism. It was not long before troubles in European states on every side made a practical interpretation of this promise necessary, and then it became clear that it was capable of two very different constructions. Lafayette, and doubtless the majority of the nation, understood that, by this language, France committed herself to active interposition in behalf of liberty in the case that any other nation interposed in behalf of monarchy. The ministry of Louis Philippe, on the contrary, maintained that they had only promised that France would "*not suffer it*," but that these bound them to nothing beyond expressions of disapprobation or of sympathy, and did not by any means commit them to a course of active hostilities. Great was the indignation of Lafayette at this language, which seemed to him but a paltry subterfuge. Ardent and frequent were his harangues in opposition. He threw his whole weight against the policy of the government, but it was only as a feather in the balance against the dominant power in the state. In this most important struggle Lafayette suffered utter defeat, and was obliged to acknowledge that he was disappointed and dissatisfied with this new order of things, which seemed so little different from the old. Little by little the breach between him and the new dynasty widened. A steady pressure, slowly but surely, crowded him out of public life. A carefully concerted series of measures drove him finally to resign the command of the national guard. And while he appeared to do it voluntarily, the ministers of Louis Philippe wept crocodile tears, and deplored that so valued a citizen should so obstinately insist upon depriving the country of his services, and withdrawing to the comparative uselessness of private life. The great spirit of Lafayette was saddened by this ungenerous intriguing, but with advancing years he had acquired modesty in proportion as he might more justly have gained self-confidence, and he submitted with a noble, simple humility, expressing his opinion boldly, as he always had done, and never could help doing, but breathing a touching hopefulness that events

would work themselves right in good time, and that the errors of the present were but the temporary accident of a day. On resigning his command he uttered the following sentences:

"*My conscience of public order* is now perfectly satisfied. I acknowledge that it is not the same with *my conscience of liberty*. We all know the motto of the Hôtel de Ville—*a popular throne surrounded by republican institutions*. This motto has been accepted, but we do not all understand it in the same sense. It has not always been understood by the Councils of the King as it has been by me, who am more impatient than others to realize it."—*Sarrans*, ii., 147.

With these words he retired from the noble office of Commander-in-Chief of the National Guard, which he had first held fifty years before. We have not now room to go into the question of how far right lay upon his side, and how far it lay upon the side of the government. Powerful considerations and strong arguments lay with each, and it is needless to accuse Louis Philippe of insincerity in his early promises or of inconsistency in his later career. His situation, with the ominous warnings of French history for the past half-century, was exceedingly trying. We could not, in our brief space, do full justice to the position of both parties, and shall, therefore, not enter upon the discussion, but content ourselves with the narration already given which sufficiently shows the points of difference.

ART. V.—1. *Outlines of Astronomy.* By Sir J. F. W. HERSCHEL. 8vo. Philadelphia: 1849.

2. *Cosmos.* By ALEXANDER VON HUMBOLDT. 4 vols. Henry G. Bohn, London: 1852.

3. *Philosophical Transactions of the Royal Society of London for* 1850 *and for* 1861.

THE mind of man, never satisfied with present knowledge, but always eagerly prying into the unknown, reaches out towards the infinite in the regions of space, leaving earth, sun, planets, and isolated fixed stars behind, and fixing its attention on clusters of starry suns, whose existence is made known through the telescopic tube, gathers knowledge respecting the structure of the universe, and the laws which

control parts so immeasureably distant, that it surpasses the powers of the imagination to gather even an approximate idea.

No one, who gives much attention to the phenomena presented by the nocturnal heavens, can fail to see that the stars are not scattered promiscuously over the sky, but that, on the contrary, there is a general tendency to appear in groups of greater or less extent. When the telescope is employed, many clusters, not visible to the naked eye, are brought into view. The more powerful the telescopic aid, the greater is the number of these groups of stars that are brought within the range of vision. While the telescope readily resolves many of these clusters into the individual stars which compose them, there are many more which it does not. Such clusters as the telescope is unable to separate into their individual components, have, from their cloudy appearance, received the name *nebulæ*.

From the time of the first discovery of an isolated nebulous spot near the star *Nu*, in Andromeda (by Simon Marius on the 15th of December, 1612*), unresolvable into stars by telescopes of that age, astronomers have been divided in opinion on the resolvability of all nebulæ; some maintaining that we only need sufficient optical power to show that every spot of that character is composed of stars, while others contend that *no* power of the telescope could possibly resolve some of the nebulæ into such bodies, they being nebulæ in the proper sense of the word, and composed of cloudy, vapourous matter not yet formed into stars. Some observations, which we shall mention in their proper place, seem to show that the opinion of the latter class of astronomers is well founded.

Hevetius, in his catalogue of fifteen hundred and sixty-four stars, for the epoch 1660, does not enumerate more than sixteen nebulous spots whose positions were accurately determined. In 1656 Huygens discovered the great nebula in the sword of Orion, which has become very celebrated from the number and celebrity of the observers that have given their attention to it, and for the accuracy and extent of the observations that have been made upon it. Edward Halley, while residing in St. Helena, in 1677, was the first to determine any of the isolated nebulous spots of

* *Cosmos*, vol. 4, p. 296. It had been previously seen in 985 and 1498.—A. D., p. 318.

the southern hemisphere not visible in Europe. Lacaille, during his residence at the Cape of Good Hope, and in the Isle of France and Bourbon, between 1750 and 1752, added much to the knowledge of nebulous spots in the southern hemisphere. Messier, in his catalogue of one hundred and three nebulæ for the year 1771, added sixty-six new nebulæ to what were previously known. But, for all this, comparatively little had been done in the observation of nebulæ when the superior intellectual powers of Sir William Herschel were directed to the subject in 1779.

This great observer began, with a seven-foot reflector in the above-mentioned year, a regular exploration of the heavens, in search of nebulous masses. In 1787 his gigantic forty-foot telescope was completed, by which he could penetrate into space distances much greater than had been done before, and it revealed the existence of numerous nebulæ invisible through instruments of less space-penetrating power. By means of this great instrument many (previous) nebulæ were resolved into stars, while it revealed the nature of the internal structure of many others. In the three catalogues which he published in 1786, 1789, and 1802, he indicated the positions of two thousand five hundred nebulæ and clusters of stars.

Dr. Herschel divided the various objects seen by him in the sidereal heavens into twelve different classes, as follows: first, insulated stars; second, binary stars; third, triple and multiple stars; fourth, clustering collections and the milky way; fifth, groups of stars; sixth, clusters of stars. These objects Herschel very properly regarded as the most magnificent in the whole heavens. They are round in form, and are gradually more condensed towards the centre. If they were spherical in form, and the stars distributed uniformly throughout them, this alone would cause them to increase in brightness towards the centre; but some of them increase more rapidly than an equable distribution would warrant, thus indicating a physical connection among the members of each cluster, more intimate than among stars in general.

"It would be a vain task," says Sir John Herschel, "to attempt to count the stars in one of these *globular clusters*. They are not to be reckoned by hundreds; and, on a rough calculation, grounded on the apparent intervals between them at the borders, and the angular diameter of the whole group, it would appear that many clusters of this description must contain, at least, five thousand stars, compacted

and wedged together in a round space, whose angular diameter does not exceed eight or ten minutes; that is to say, in an area not more than a tenth part of that covered by the moon."* The same authority says that *Omega* Centaur is "by far the most conspicuous and remarkable" object of this class in the whole heavens. The most beautiful one in the northern hemisphere is that between the stars *Eta* and *Zeta* Herculis. Both can be seen with the naked eye.†

7. Nebulæ. These Herschel supposed to be clusters so far removed from us that the power of the telescope is not sufficient to separate the light from the members so as to perceive them individually. Since four stars of equal brightness, whose light is blended, can be seen at double the distance from one of them separately, nine at treble the distance and so on, we see that a cluster of ten thousand can be seen at one hundred times the distance of a single star. In this way Herschel estimated that some of the fainter nebulæ, visible by means of his forty-foot telescope, are at so enormous a distance that it requires light, moving one hundred and ninety-two thousand miles in a second, two million years to come from them to the earth. Thus we see, as Herschel remarked, that the telescope enables us to penetrate into *time* as well as space; and, as Humboldt says, astronomy affords us the most ancient evidence of the existence of matter.

8. Stellar Nebulæ. These were supposed to be composed of stars whose light was so united that the only evidence of their resolvability into discrete bodies consists in the appearance of bars.

9. Milky Nebulosity. According to Herschel the phenomena of this class were of two distinct kinds. The first were merely clustering collections of stars contiguous to one another, in structure something like the milky way. The other species he supposed to be composed of matter purely nebulous. It is this kind of nebulæ that is now attracting special attention among astronomers. What the telescope failed to show the spectroscope seems to reveal. Some recent spectral observations on nebulæ, by Higgins, seem to show pretty conclusively that some of Herschel's *milky nebulosity is* purely nebulous. The great nebula in Orion was, for many years, thought to be composed of such matter, but the six-foot reflector of Lord Rosse, and the

* Outlines, pp. 556–57. † Ib., pp. 558–9.

Cambridge achromatic in the hands of Professor Bond, partially resolved it into stars.

10. Nebulous Stars. 11. Planetary Nebulæ. 12. Planetary Nebulæ, with centres.* "Planetary nebulæ," says Sir John Herschel, "are very extraordinary objects. They have, as their name imports, a near, in some instances a perfect, resemblance to planets, presenting discs round or slightly oval, in some quite sharply terminated, in others a little hazy or softened at the borders. Their light is, in some, perfectly equable, in others mottled, and of a very peculiar *texture*, as if curdled." They are comparatively rare objects, only a few having been discovered, and of these nearly three-fourths are situated in the southern hemisphere.

Sir William Herschel divided all nebulæ into two general classes—*resolvable* and *irresolvable*. Resolvable nebulæ are such as excite a suspicion, from their appearance, that an increase of optical power would resolve them into stars, and show them to be clusters which appear as nebulæ. Irresolvable nebulæ are those which are composed of gaseous or nebulous matter. Of the former class several have, since Herschel's day, been resolved, or partially resolved, by the powerful telescope of Lord Rosse, and by the great refractor of the Cambridge (U. S.) Observatory, and a few of the latter class.

Herschel was led, from his extensive and long-continued observations on nebulæ, to conclude that irresolvable nebulæ are the material from which stars are gradually formed by the action of natural laws. Later astronomers, by adding this to the celebrated nebular hypothesis of Laplace, have built up a beautiful theory to account for the order exhibited in the solar system.†

In 1833 Sir John Herschel communicated to the Royal Society of London a paper containing the results of his examination of the nebulæ visible in the northern hemisphere with a twenty-foot reflecting telescope. The observations were begun in 1825, and continued during the subsequent eight years. The paper contains two thousand three hundred and seven nebulæ and clusters, five hundred of which were new. It occupies one hundred and seventeen pages, and is one of the most magnificent productions ever published on the subject. It must form one of the great landmarks of sidereal astronomy.

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* Grant's Hist. Phys. Ast., pp. 565–7.

† See Ennis On the Origin of the Stars.

In 1834 Sir John Herschel commenced a survey of the southern hemisphere from the Cape of Good Hope. He used the same telescope that he employed in observing the nebulæ in the northern hemisphere, and his observations were continued till 1838. In 1847 his volume, "Results of Astronomical Observations made at the Cape of Good Hope," was published, containing another catalogue of one thousand seven hundred and eight nebulæ and clusters of stars, making in all four thousand and fifteen objects of this class, which may be taken as about the number that can be seen in the whole heavens with a twenty-foot reflecting telescope with a speculum eighteen inches in diameter. From the unrivalled powers of description by which the author of these catalogues is distinguished, the monographs which they contain have imparted to them an interest extending far beyond the mere circle of strictly scientific enquirers, who see in them mainly the solid groundwork of ulterior researches of high importance in stellar astronomy.

Elliptic nebulæ are found to be much more difficult to resolve than those of a globular, or, perhaps we should say, of a circular form. It seems highly probable that elliptic nebulæ are really ellipsoidal in form, and very much flattened, so that when we do not look upon the nebulæ in a direction parallel with their axes, they appear elliptical in form. They are quite numerous, and of all degrees of ellipticity, from a slight departure from the circular form to ellipses so eccentric as to be almost linear. These last are, without doubt, ellipsoids seen edgewise. Some circular nebulæ are probably ellipsoidal, but seen in the direction of the axis, while others, without much doubt, are globular, or but slightly eccentric ellipsoids.

The elliptic nebula in the girdle of Andromeda is easily distinguished with the naked eye. Simon Marius described it in 1612, as presenting the appearance of that of a candle shining through horn. When seen with ordinary telescopes, it appears a pretty elongated oval, increasing in brightness very gradually at first, but afterwards much more rapidly up to a central point, approximating to a star in brightness. Sir John Herschel, with his eighteen-inch reflector of twenty feet focal length, saw nothing to excite any suspicion of its resolvability. Professor George P. Bond, however, with the great refractor of the Cambridge Observatory, describes and figures it as extending about two and a half degrees in

length, and more than a degree in breadth, so as to include two smaller adjacent nebulæ. The form, though generally oval, is somewhat irregular at its north following extremity. He succeeded in counting upwards of fifteen hundred stars appertaining to the nebula, but the central parts have not been resolved.*

After Lord Rosse had finished his great telescopes (reflectors) of three and of six feet in diameter, in 1839 and in 1844, he commenced a re-examination of several of the nebulæ described by Sir John Herschel in his catalogue of 1833. New phenomena, of a very interesting character, were revealed in the course of these observations. Many nebulæ which had resisted all inferior powers were shown to consist entirely of stars. Others presented peculiarities of structure wholly unexpected. No less than fourteen presented a spiral arrangement. Among these No. 51 of Messier's catalogue, situated in the constellation *Canes Venatici*, near *Boötes*, is one of the most remarkable. Messier had described it as a double nebula containing stars. Sir William Herschel represented it as a bright round object, surrounded by a halo or glory at some distance from it, and accompanied by a companion. Sir John Herschel discovered that the southwest half of the ring was divided into two branches, and he was led to speak of it, in his catalogue of 1833, in the following terms: "Supposing it to consist of stars, the appearance it would present to a spectator placed on a planet attendant on one of them, eccentrically situated towards the north preceding quarter of the central mass, would be exactly similar to that of our milky way, traversing, in a manner precisely analogous, the firmament of large stars, into which the central cluster would be seen projected, and (owing to its greater distance) appearing, like it, to consist of stars much smaller than those in other parts of the heavens. Can it be, then, that we have here a real brother system, bearing a real physical resemblance and strong analogy of structure to our own?" Lord Rosse, in answering the question, destroyed Sir John Herschel's beautiful surmise, by showing the nebulæ to have a spiral arrangement. A connection was also traced between the principal nebula and its companion by means of the spirals. The centre of the nebula was "clearly resolved in the three-foot reflector; and

* See Trans. Am. Academy of Arts and Sciences, new series, vol. iii., p. 75.

in his six-foot telescope the different convolutions were seen, on the finest nights, breaking up into stars. What the next advance in the construction of telescopes will reveal, respecting the general structure of this nebula, it is difficult to imagine.

The remarkable class of objects known as planetary nebulæ, when viewed by means of the six-foot reflector, "have failed to exhibit that uniform aspect which had proved such a stumbling-block to Herschel in his attempts to explain this structure. Five nebulæ, which previous astronomers had represented as possessing a round uniform disk, were found by Lord Rosse to exhibit unequivocal indications of an annular structure."

Herschel's nebulous stars, which he could not account for except by assuming the existence of a self-luminous fluid, shining independently in space, are seen to be very much transformed when viewed by means of Lord Rosse's six-foot speculum. One of the most interesting objects of this class, the nebulous star No. 450, of Herschel's catalogue of 1833, is seen to be placed in the centre of a nebulous nucleus, and beyond there is a nebulous ring completely separated from the latter. Iota Orionis exhibits a similar appearance, and also a dark cavity not symmetrical with respect to the star.

Annular nebulæ are very rare objects, a few only having hitherto been discovered. The most conspicuous one of this class is found very nearly midway between the stars *Alpha* and *Beta* Lyræ. It can be seen with a telescope of moderate power. It is small and particularly well defined, so that it appears more like an oval, solid ring, whose axis are as four to five, than a nebula. The central part is not quite dark, but is filled with a faint nebula, "like a gauze stretched over a hoop." Sir William Herschel discovered some stars in the ring; but Lord Rosse, with his telescope, Bond with his reflector,* and M. Chacornac, with M. Foucault's great reflecting telescope of plated glass, have completely resolved it into stars. Lord Rosse's telescope exhibits this nebula in the form of an ellipse, "with remarkable divergent, thread-like nebulous appendages." M. Chacornac found the brightest of the stars, into which the ring is resolved, to occupy the extremities of the shortest diameter. The interior of the ring was resolved into a thin stratum of very small stars.

Some observations, made within the last few years, seem

* Fifteen-inch object-glass, and twenty-three feet focal distance.

to show that certain nebulæ are not only variable in brightness, but that they are changing in appearance and place so rapidly as to be apparent after the lapse of a comparatively short time.

Sir William Herschel divided the nebulæ into three classes, with respect to their relative brightness. Dr. d'Arrest, director of the Observatory of Copenhagen, in re-examining the nebulæ, has found it necessary to change some of the nebulæ as classed by Herschel to other classes, and even as much as two units.* Herschel himself, in the course of some years, found it necessary to change his estimates. Owing to the changeable nature of our atmosphere, it is evident that no definite conclusion can be drawn from such observations. There are a few instances, however, in which a certain degree of variability has been positively ascertained. The first case which we shall mention, is that of the most total disappearance of a small, faint nebula discovered by Mr. Hind, October 11, 1852, in the constellation Taurus. It was recognized by other astronomers, and in the beginning of 1856 it was still readily perceptible with a telescope of six feet focal distance. Two years later it could only be seen with great difficulty with the great heliometer of the Königsberg Observatory. On the 3d of October, 1861, it could not be seen with the large achromatic telescope of Copenhagen(eleven-inch aperture, sixteen feet focal length); nor in 1862, with M. Foucault's new (plated glass) telescope, or Mr. Lassell's reflector, four feet in diameter, in Malta. It was still to be seen, however, with the Pulkava telescope. It is not a little curious that the dimunition in brightness of this nebula corresponds exactly with that of a small star seen almost in contact with it. Another case of variability is that of the great nebula in Orion, of which we shall speak presently.†

The star *Eta Argus*, in the southern hemisphere, it is well known, is subject to great extremes of brightness, varying

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* Smithsonian Report for 1863, p. 308.

† There are several other cases of variable nebulæ reported, but they are not very well established. Dr. D'Arrest announces in Nos. 1378 and 1379, *Astronomische Nachrichten*, the existence of two other variable nebulæ in Taurus. Other astronomers, however (Dr. Auwers, Mr. Schönfield, and Dr. Winnecke), think it very doubtful about the variability of these nebulæ. In No. 1393 of the *Ast. Nach.*, Dr. D'Arrest notices the fact that Jeaurat marked on a chart, published in 1779, the existence of a nebula to the north of Pleione, one of the Pleiades, and that it has not been re-discovered. He, therefore, concludes that this region is peculiarly subject to variation of light.

from the fourth magnitude to a brilliancy almost equal to that of Sirius. This star was situated, in 1838, in the most dense part of a very extensive nebula, occupying a square degree in extent. We quote Sir John Herschel's description of this object: "Viewed," he says, "with an eighteen-inch reflector, no part of this strange object shows any signs of resolution into stars; nor in the brightest and most condensed portion, adjacent to the singular oval vacancy in the middle of the nebula, is there any of that curdled appearance, or that tendency to break up into bright knots, with intervening darker portions, which characterize the nebula of Orion, and indicate its resolvability. The whole is situated in a very rich and brilliant part of the milky way, so thickly strewed with stars, that, in the area occupied by the nebula, not less than twelve hundred have been actually counted, and their places in R. A. and P. D. determined. Yet it is obvious that these have no connection whatever with the nebula, being, in fact, only a simple continuation over it of the general ground of the galaxy, which, on an average of two hours in night ascension in this period of its course, contains no less than three thousand one hundred and thirty-eight stars to a square degree; all, however, distinct, and (except where the object in question is situated) seen projected on a perfectly dark heaven, without an appearance of intermixed nebulosity. The conclusion can hardly be avoided, that in looking at it we see through and beyond the milky way far out into space through a starless region, disconnecting it altogether from our system. 'It is not easy for language to convey a full impression of the beauty and sublimity of the spectacle which this nebula offers, as it enters the field of view of a telescope fixed in right ascension by the diurnal motion, ushered in as it is by so glorious and innumerable a procession of stars, to which it forms a sort of climax,' and in a part of the heavens otherwise full of interest."*

In Herschel's figures, the open space has somewhat the form of a dumb-bell; but, according to F. Abbott, Esq., in a note published in the Proceedings of the Royal Astronomical Society,† "the appearances of the open space now assumes the form of a crooked billet, wide in the centre and open at both ends, with *Eta Argus* situated within the open space or dark part, and surrounded with an almost innumer-

* Outlines of Astronomy, Art. 887. † November 13, 1863.

able quantity of brilliant stars, many of which are arranged in groups, some being of a blue and some of a ruddy colour. They are remarkably brilliant in the dark space, and afford a good comparison with the variable star itself." When Herschel saw *Eta Argus* in 1838. in the most dense part of the nebula, it was of the first magnitude; but in 1863, when out of the nebula, it was reduced to the sixth magnitude. This looks very much like a connection between the nebula and star during the irregular variation of the light of the latter. Can we not explain the phenomena of *temporary stars* by supposing them connected with nebulous matter during their appearance?* The writer further adds: "That the star's right ascension has not varied so much will be manifest. It is clear, then, that the dense portion of the nebula, toward the east, must have receded, leaving each end open, and *Eta Argus*, together with about seventy stars up to the fourteenth magnitude, as seen within the dark space." It seems pretty clear that the position and form of this nebula are changeable.

The great irregular nebula in the sword-handle of Orion has, perhaps, been more thoroughly studied than any other of its class. This nebula occupies a considerable area in the heavens, the part usually seen with good telescopes being 30′ in right ascension and 24′ in polar distance; but the most powerful telescopes trace it considerably beyond these limits. Many stars are scattered over it, which do not appear, for the most part, to have any connection with it. The remarkable sextuple star, known as Orionis, occupies a very conspicuous position close to the brightest portion. It is a little curious, however, that, within the area of the trapezium, formed by the four principal stars of Θ, "no *nebula* exists."

Sir William Herschel was led to the conclusion, from his observations continued through many years, that the nebula in Orion is subject to changes which become visible after the lapse of a few years. Sir John Herschel seemed to doubt the existence of any perceptible change.† From many observations Sir William Herschel concluded that this nebula was not farther from us than stars of the eighth magnitude; and since his great telescope gives no indication

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* Since writing the above we have seen a statement made by Mr. Huggins that he has proved, by means of the spectroscope, the truth of our suggestion.

† Outlines, Art. 855.

of its resolvability, he concluded it to belong to that class which have not yet been formed into stars. It is well known, however, that the brighter part, lying immediately adjacent to the trapezium, has been resolved into stars both by Lord Rosse and Professor Bond.

In a paper communicated to the Academy of Sciences of St. Petersburgh in 1856, Liapounoff, director of the Observatory of Kasan, gives the results of four years' observation made with an achromatic telescope of the size of that of Dorpat. He has applied himself to a very exact determination, by a process of triangulation, of the positions of all the stars that his telescope will show in the nebula, and a very careful delineation of all the parts of that celestial object. In comparing the results of M. Liapounoff with those of Sir John Herschel, Lamont, and Bond, M. Struve thinks that this nebula is subject to changes of form and relative brightness in its different parts.

M. Otto Struve, director of the Observatory of Pulkowa, in a paper presented to the Royal Astronomical Society in 1857, states that he has found numerous small variable stars in the nebula of Orion. The existence of so many of these, he thinks, indicates their connection with the mysterious nature of this body. He says that the general impression resulting from his observations is to the effect that the central part of the nebula is subject to a continual change of brightness, as regards many of its portions. "In those cases where the images were most distinct, their appearance did not seem entirely uniform from night to night. These changes in the degree of light cannot, however, be perceived in the greater number of cases without instruments of considerable optical power. He does not think that achromatic telescopes, of less than ten inches opening, can serve to verify them, except under atmospheric conditions extraordinarily favourable."

The late Professor George P. Bond began, in 1857, a series of observations on the nebula of Orion with the Cambridge equatorial; but they were interrupted in 1858 by the work due to the great comet of that year, and from other causes, and were not resumed till after the publication of the volume on the comet. The observations were then prosecuted as the failing strength of Professor Bond would permit, almost to the time of his death, in 1865. The volume*

* Annals of the Astronomical Observatory of Harvard College, vol. v.

on the nebula was edited by Professor T. H Safford, long associated with Professor Bond in the observatory. With the discussions and explanatory notes of the editor, this volume contains materials of inestimable value to future observers of this nebula, and it will contribute largely towards the settlement of the question of the variability of form and brightness in this object, and of light in the stars near it. The discovery of the spiral form of the nebula is due to Professor Bond.

We shall terminate this article with a brief account of the application of the principles of spectrum analysis to nebulæ, by William Huggins, F. R. S.* The results have their foundation in this: All known solid and liquid bodies, with the single exception of the metal erbium, gives a continuous spectrum, when they are treated sufficiently to give out light; and now but gases (with the exception above) give an interrupted spectrum with bright lines. In August, 1864, Mr. Huggins examined the planetary nebula (37 H. IV.) in Draco, and found its principal spectrum discontinuous, but there was another very faint continuous spectrum. He concludes that the latter was produced by the solid or liquid nucleus, while the former was formed by the light from the luminous gas which surrounds it. A planetary nebula in Taurus Poniatowski has a similar constitution. By comparing the first of these spectra with the spectrum of nitrogen he found that the brightest lines of the former coincided with the strongest line of the latter, and the faintest of the three lines of which the spectrum was composed, coincided with the green line of hydrogen, showing that these two gases exist in the nebula.

The annular nebula in Lyra gives a spectrum which "consists of one bright line only. When the slit of the instrument crosses the nebula, the line consists of two bright portions, corresponding to the sections of the ring. A much fainter line joins them, which shows that the faint central portion of the nebula has a similar constitution." This indicates that the real nebula has not been resolved.

The *dumb-bell* nebula gives a spectrum consisting of one line only; and a primatic examination of the light from different parts of it shows that throughout it is of a similar

* See Silliman's Journal, [2] vol. xl., pp. 77–81, and Smithsonian Report for 1866, pp. 203–6.

constitution. The spectrum of the nebula in the sword-handle of Orion, consists of three bright lines. This object is therefore gaseous. Lord Rosse says that the bluish-green matter of the nebula has not been resolved by his telescope. "In some parts, however, he sees a large number of very minute *red* stars, which, though apparently connected with the irresolvable matter of the nebula, are yet, doubtless, distinct from it. These stars would be too faint to furnish a visible spectrum" with the instrument which Mr. Huggins uses.

All true clusters, which the telescope resolves into distinct points of light, give a spectrum which does not consist of separate bright lines, but it is apparently continuous. Many *nebulæ* furnish a similar spectrum. He concludes as follows: "Half of the nebulæ which gain a continuous spectrum have been resolved, and about one-third more are probably resolvable; while, of the gaseous nebulæ, *none have been certainly resolved*, according to Lord Rosse."* The phenomena of light and colours seem likely to reveal to our understanding the most intimate constitution of bodies near and remote.

ART. VI.—1. *Die reformatorischen Schriften* (The Reformatory Writings of) *Dr. Martin Luther's.* Von ZIMMERMANN.

2. *Vita Lutheri* (Life of Luther). PH MELANCTHON.

3. *Historia de Actis et Scriptis Lutheri* (History of the Life and Writings of Luther). CRUCHTÆUS. Paris.

4. *The Life of Martin Luther.* Related from Original Authorities; with sixteen engravings. By MORITZ MEURER. Translated from the German by a Pastor of the Evangelical Lutheran Church. 8vo. New York: Ludwig & Co.

5. *The Life of Martin Luther.* Gathered from his own Writings. By M. MICHELET, author of "History of France," &c., &c. Translated by G. H. Smith, F. G. S. New York.

6. *The Table Talk* (*Tischreden*) *or Familiar Discourse of Martin Luther.* Translated by WILLIAM HAZLITT, Esq. London.

7. *History of the Reformation in the Sixteenth Century.* By MERLE D'AUBIGNÉ.

LEST any may take up this paper under the impression that, because we have placed the name of Luther at its head, we are about to engage in a religious controversy in favour

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* Smithsonian Report for 1866.

of one sect or another, we think it proper to undeceive them at once. In our opinion, if that style of writing ever does much good, it must be in the hands of theologians. It may be edifying in some way, that we cannot pretend to understand, for doctors of divinity to abuse each other for the love of God; but when undertaken by lay persons like ourselves, we think it will be generally admitted that there is no edification in it. We are of opinion that there is a good deal more in showing that, if our different Christian sects understood each other better, they would dislike each other less than they do; nay, they would wonder why they have been at variance with each other so long.

We are not so sanguine as to hope that we could remove their misunderstandings, and reconcile all to each other, so that they could be made to see that the fundamental doctrine of Christianity is the same with all. But if we could only exercise that salutary influence on a dozen persons belonging to each of the more moderate sects, we should consider our effort as well rewarded. As for the extremists—those who are actuated more by prejudice than by reason or religion, and who think that the farther they depart from the ancient faith, the nearer they approach to heaven—we do not address ourselves to them, because it would be a useless task. It is not necessary for our purpose to mention fifty sects, or even a dozen; all we have to say on reconciliation and Christian unity will, we trust, be rendered sufficiently intelligible, without mentioning any others than Catholics and Protestants.

We take up the life of Luther to examine it in connection with the history of his time, because we feel convinced that if both Protestants and Catholics understood it better than they do they would be much more charitable to each other than they are. Only the few on each side take the trouble to examine it carefully; if the rest give themselves any trouble about it, they are content to adopt the views of others on the subject. What is at once very exciting and very cheap is the sort of history that most strongly recommends itself to this class, and, accordingly, we have Protestant and Catholic histories of Luther and the other Reformers, which are nearly as romantic as those of Jack the Giant Killer and Sinbad the Sailor. It is, therefore, no more than what we ought to expect, that, while most Protestants regard the subject of our present article as a saint and prophet, most Catholics regard him as a demon and hypo-

crite. All we will say of him at present is, that he was a man of great intellect, who had great virtues and great faults. But, however much he may be admired or censured, it is certain that no unprejudiced person, who has carefully studied his life and times, will deny that many of the charges which are still made against the condition of the Church in his time are unjust; he will admit at least that the clergy of those days were very far from being so ignorant as they are represented; still more readily, if possible, will he admit that, far from being a proscribed book, the Bible was carefully read and taught in all respectable schools, and especially in those conducted by religious fraternities or priests.

Much as Luther inveighs against "popery," he tells us more that is favourable than unfavourable of the system. It seems to us that he never makes a charge against the old Church without making some admission which serves at least as an extenuating circumstance in favour of the accused; even when he makes no such admission expressly, his incidental remarks, relative to the conduct of particular bishops, archbishops, priests, and monks show that, whatever practices some individuals may have been guilty of, there were learned, good, and pious men in the Church—men, too, who had been kind and indulgent to him. Their language, as quoted by him, is sufficient proof of this in many instances, altogether independently of their acts. Then, again, it would be difficult to form a bad opinion of a system which produced so learned a man, and so bold and profound a reasoner, even if we had never known anything good of it before. This fact will be the more readily admitted when it is borne in mind that Luther had no disposition to be a preacher until his superiors urged him to it. Even then he made many excuses, alleging, among other things, that he would not be alive six months if obliged to preach. Finally, he tells us, that he became a preacher, not because he thought he had any aptitude for it, but because he could not disobey his superiors. There are many similar facts related by Luther and his brethren, which are very inconsistent with the alleged gross ignorance and stupidity of the priests and monks of those times. But, before we proceed any further in this direction, let us pause for a moment or two to see what were the advantages possessed by Luther in his youth, or what was the influence which enabled him to qualify himself for the work of a Reformer; in short, it is necessary

that we should know what sort of people taught him, and then, having taught him, knew what he was best competent for.

Luther was born at Eisleben, in Saxony, in November, 1483. His parents were very poor; he tells us himself that his ancestors had been farmers for generations. His father having found farming unprofitable, turned his attention to mining; nor does it appear that he succeeded much better at the latter business. But it seems that both himself and his wife were honest and pious. "Their first care," says D'Aubigné, "was to communicate to him the knowledge of God, to train him in His fear, and to form him to the practice of the Christian virtues."* They caused him to attend church regularly, where he soon learned to sing in the choir. On account of the poverty of his parents, he was obliged to avail himself, while yet a child, of the musical talent thus acquired in order to procure his daily bread. There is no doubt that he begged from door to door, asking bread for the honour of God (*Panem propter Deum*), and singing for those who wished him to do so. At the age of fourteen he was sent to Magdeburg to attend the Franciscan school. Here, it seems, he received his tuition gratis, but he had to beg about for his support, as was the custom of all poor German students in his time. After remaining a year at Magdeburg, he went to Eisenach, where he pursued the same course. Here a pious lady, who observed his earnest conduct in church, and liked his singing, took him to her own table, so that he had not to go from door to door any longer. It does not appear, however, that he was quite a saint, even while singing and praying in this way; otherwise, both his parents and his teachers must have been very cruel, for they whipped him severely. "My father," he says, "once scourged me so severely that I conceived for him a great aversion and dislike. My mother, at another time, because of an insignificant nut, beat me until the blood flowed," and D'Aubigné tells us that, while at school in Mansfeld, his master flogged him fifteen times in one day.† But whether it was young Luther himself that was to blame for these scourgings, or whether we are to attribute them to the irritable temper of his parents and teachers, it is not the less true that he made considerable progress in his studies under their influence. Whatever were the faults of the monks, he could not deny that they were excellent teachers;

* Histoire de la Reformation, &c., vol. i., p. 122.
† Ib., vol. i., p. 123.; Meurer, p. 12.

under their tuition he had mastered the Latin language at the age of sixteen. Two years after, his father, whose circumstances were now somewhat improved, sent him to the University of Erfurt, with the view of making him a lawyer. It seems, however, that instead of studying law he devoted himself with more ardour than ever to the perusal of Cicero, Virgil, and Livy. The Franciscans had taught him always to pray before commencing his studies, and he tells us that, by pursuing this course, "one studies more than half better."* At the age of twenty, while yet at the University, he had a severe attack of illness, of which he feared he would die. He was visited by an aged priest, who comforted him, telling him that he would not die then, and adding the following remark: "For God early permits those whom he loves, and whom he wishes to use for great and good purposes to bear the holy cross."† Soon after he met with an accident, which caused him to lose much blood. This time, also, he feared that he was about to die, and cried "Mary, help!" Ascribing his recovery to the interposition of the Virgin, he secretly resolved on entering a convent. Accordingly, in 1505, while his learning and talent were exciting the admiration of the whole University—after he had obtained the degree of Master of Arts—he left that institution on the night of the 17th of July, and knocked at the door of the convent of the Augustine brothers, who received him, he tells us, in the kindest manner. As a novice he had to perform some menial offices in accordance with the rules of the brotherhood. But as soon as Dr. Staupitz, the provincial of the order, came to visit the convent, he gave directions to the prior to excuse Luther from those disagreeable duties, in order to leave him sufficient time to study. Luther fully availed himself of the privilege thus kindly and thoughtfully allowed—a privilege which he admits was not granted to wealth or rank, only to learning and talent—and he tells us that the provincial was so much pleased at the progress he made, that he preferred him to all others.‡

Two years after entering the convent he was consecrated as priest. According to his own statement there was no more pious priest of his time; he tells us that he omitted nothing that a devoted clergyman was supposed to do. But he was subject to fits of despondency; and while in this frame of mind the good provincial did all he could to console

* Meurer, p. 15. † Melanch. in vita, p. 6; Meurer, p. 16.
‡ Luther's Works, vol. xviii., p. 55; Meurer, p. 22.

him. Once he said to him, among other things: "You wish to be an imaginary sinner, and take Christ for an imaginary Saviour; accustom yourself to think that Christ is a true Saviour, and that you are a real sinner. God does not play with shadows, and does not trifle when he sends us his Son and gives Him for us."*

Luther gives several other quotations from the remarks of the provincial, which show not only that he was neither ignorant nor stupid, but that he was quite as well versed in Scripture as most of our Protestant divines of the present day. Nor was it the provincial of the order alone whom he found thus kind, pious, and well acquainted with the duties of a Christian. More than once he expresses his gratitude to an aged brother belonging to the same convent. On one occasion, when Luther made known to this brother his inward trials, he pointed to the Apostles' Creed, where it says, "I believe in the forgiveness of sins." This clause, says Luther, he explained thus: "It is not enough to believe in general that the sins of some men are forgiven; the devils, too, believe that the sins of David and Peter are forgiven; but God will have every one believe that his own sins are forgiven."†

But Luther did not merely find that the monks were acquainted with the Scriptures; he had no difficulty in finding the Bible in their library; and instead of preventing him from reading it, they advised him to make it his chief study.* Luther acted accordingly; and the provincial was so well pleased with the progress he made, that he secured for him the position of Professor of Theology in the new University of Wittenberg. In order to qualify him for this, in accordance with the laws of the University, he had him admitted to the first theological degree, in March, 1509. Even now, Luther was much more disposed to dispute about the dialectics and physics of Aristotle than to preach the gospel; but Dr. Staupitz kindly, but firmly, insisted on his applying himself to the latter. The new theologian advanced some fifteen reasons and arguments by way of excusing himself, and showing his unfitness for the ministerial office. He concluded these by the remark, "Doctor, it will deprive me of life; I shall not endure it three months." The reply of the provincial was, "Well, in God's name grant it be so; but what

* Luther's Works, vol. xxi., p. 21; Meurer, p. 25.
† Melanch, p. 10; Meurer, p. 26.

shall we do? God has important business, and has employment for intelligent men in heaven, too," &c.*

Luther had no alternative but to comply. In order that he might have some practice before preaching in public to the congregation of the parish, the provincial caused him to preach first to the brothers of his order in the saloon of the cloister. His sermons soon attracted attention from without; so that the saloon could not hold the number who came to hear him; then he was directed to preach in the parochial church. All his Protestant biographers bear testimony to these facts; and they are corroborated by himself.†

Now we may ask, in passing, as a simple matter of justice, and for truth's sake, is there anything in these various circumstances which affords any evidence of that ignorance, superstition, and immorality, which it is so much the habit of a certain class of writers of the present day to attribute to the monks and priests of Luther's time? Who could pretend that the provincial of the Augustinian brothers was ignorant, superstitious, or immoral? Even as described by those who are most opposed to monks, no unprejudiced person can contemplate his character without wishing that there were many such educators in the middle of the nineteenth century. And that he was regarded in this light by the most enlightened of his contemporaries we have abundant evidence in the works of Luther and his biographers, without consulting any Catholic authorities. We see that the bishop of Magdeburg had induced his brother, Duke Fredrick of Saxony, to establish a University at Wittenberg. The duke and bishop agreed that no one was better qualified to carry out their design than Dr. Staupitz, the provincial of the Augustinians.‡ And did he not fully prove the correctness of their opinion of him by the manner in which he discovered that Luther possessed superior talents, and, accordingly, had him appointed professor in the new institution?

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* Luther's Letters, No. 2; Melanch, p. 12; Meurer, p. 28.

† Speaking of the convents, D'Aubigné, one of the chief eulogists of Luther and of the Reformation, makes the following admission:

"They often contained Christian virtues which grew up beneath the shelter of a salutary retirement; and which, if they had been brought forth to view, would have been *the admiration of the world*." —Vol. i., p. 146.

‡ It were well that certain Jesuit provincials of the present day understood their duties as educators half so well. If they did, it is not billiard players who would be the honoured guests at their colleges; the "cue" would not be their magic wand; nor would they remove men of acknowledged talent, learning, and enlarged views from the control of those institutions, to make room for persons who are mere boys in intellect, understanding, and intelligence, although old enough to be grandfathers.

In every order given to Luther by his superiors his learning and intelligence were taken into account, as well as his piety. Thus it was that he was appointed, in 1510, with another brother to visit Rome, for the purpose of arranging some business appertaining to the monastery. On their way to the Eternal City they put up at the convents, where they were kindly and hospitably received. Some of Luther's biographers try to enhance the interest of their narrative by relating some occurrences in connection with this journey, which are rather of a suspicious character. They tell us that when Luther reached the Appenines he came in contact with some monks, whom he found eating meat on Friday. He admonished them for this, reminding them that the Pope had forbidden the use of meat, and they were greatly alarmed. But this was not the worst of it; they made a plot to destroy him secretly, and he escaped with his life from the convent, only because the janitor gave him a hint of the danger he was in![*]

We think it requires no great penetration to see that if there was any foundation for this story, it consisted in nothing more than that the monks, who sometimes liked a good joke as well as other people, wanted to frighten Brother Martin, or, perhaps, the joke was confined to the janitor, who regarded the inquisitive and fanatical Augustinian as rather a troublesome guest. But, assuming that he did find the monks eating meat on Friday, would not this show that they were not very superstitious after all? in a similar manner, their being so much alarmed lest they might be disgraced would show that they were not the reckless profligates which it has been so much the fashion for centuries past to represent them.

We are told that in Rome, also, he found nothing but ignorance, superstition, and hypocrisy; but his own account shows that he could hardly have met with anybody more superstitious than himself. He tells us that as soon as he saw the first sight of the city he fell prostrate on the ground and exclaimed, "Hail to thee, thou holy Rome!" He became disgusted with Rome very soon, not because it was too superstitious, but because it was not sufficiently so—that is, because the cardinals and the priests sometimes joked as well as prayed. "As we were seated at table," he says, "I there heard the courtiers

[*] Luther's Works, vol. xxii., p. 236; Meurer, p. 80.

(cardinals) laughing and telling how some would say mass and speak these words over the bread and wine: 'Panis es et panis manebis; vinum es et vinum manebis.' (Bread thou art, and bread thou shalt remain; wine thou art, and wine thou shalt remain.) Now, if we believe this, we must reject the charge of superstition against the Roman clergy—in other words, we must also believe that no great Reformer was necessary to remove their credulity and ignorance on the subject of transubstantiation.

But, although Luther was horror stricken at hearing bread and wine spoken of so lightly by priests and cardinals, yet he admits that some pious thoughts occurred to him during his stay at Rome; it was by these he was first reminded of the scriptural promise, "The just shall live by faith." This, however, cost him some trouble. He had learned—perhaps from the janitor at the convent—that the Pope had promised an indulgence to all who, as a last resort to find peace and rest, would on their knees climb up Pilate's staircase, said to have been brought to Rome from the Hall of Judgment at Jerusalem. The hint was quite sufficient for Luther; and, accordingly, it was while he was trying to earn this indulgence, that it occurred to him that faith without works is such a good thing.* "Then I immediately felt," he says, "that I was wholly born anew, and at once had found a broad and open door into paradise; the Holy Scriptures, too, now seemed to me to be quite different from what they had been before."†

Now it seems to us that, if mounting Pilate's staircase was productive of such excellent results, neither the staircase itself, nor the Pope who granted the indulgence for mounting it, ought to have been so much abused as they have been. Be this as it may, it seems that Luther learned Scripture at Rome; and he was duly rewarded for his proficiency on his return home. Before he knew anything of the matter himself, Dr. Staupitz, and the whole convent to which he belonged, had determined on his becoming a Doctor of the Holy Scriptures. This determination the provincial made known to him under a tree in the fields of the cloister at Wittenberg. Again Luther begged, he says, to be excused, telling his superior that he was a weakly and sick brother, who had not long to live. To this Staupitz

* Seckendorfinum, vol. ii., p. 40; Meurer, p. 81. † Ib.

playfully replied: "Things have the appearance as if God would soon have much to do in heaven and on earth; he will therefore need many young and industrious doctors through whom to transact his business."*

What the provincial promised he was not slow in performing; on the festival of St. Luke, October 18, 1512, Martin Luther was declared licentiate of sacred theology by the Archdeacon of the Church of All Saints, in presence of a large and learned audience; and on the following day he was adorned with the badge of Doctor of Sacred Theology, during the ringing of the great bell, according to the requirements of the University statutes.

Since this is Luther's own account, which is corroborated by all his Protestant biographers, how absurd it is to accuse the monks and priests of hostility to the Bible before the Reformation? The great Reformer's own words are: "I was compelled to receive the doctorate, and *to take oath and vow* to my dearest Holy Scriptures, to preach them *faithfully and without adulteration*."† This, it will be admitted, was rather a singular way to keep the Bible in the back ground, and substitute tradition, or profane history, in its stead. Nay, what Protestant sect takes more enlightened pains at the present day to secure the preaching of the pure gospel than those much abused and despised monks did, as thus shown, before Luther or any of his brethren had uttered a word against Pope or popery?

From the disposition evinced by his superiors to make a teacher of theology of Luther, it was natural enough that he should regard himself as possessed of superior knowledge on the subject, and seeing that his talents were acknowledged by all, it is not to be wondered at that he soon began to regard himself as having a mission to fulfil. Just then the sale of indulgences commenced, which afforded him an excellent opportunity. A large proportion of the clergy, if not the majority, disapproved of this mode of raising money, although they made no opposition to it.

There can be no doubt that it was an injudicious movement on the part of the Pope; but it is equally unquestionable that there were extenuating circumstances in the case.

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* Melanch, p. 18; Meurer, p. 32.

† Luther's Works, vol. xx, p. 336; Melanch, in vita, p. 18; Meurer, p. 33.

Those who only know that all who paid a certain amount of money received assurances that their sins were forgiven them, and that their relatives were released out of purgatory, cannot help condemning the system as a very corrupt one. But when it is remembered that it was the great Leo X. who wanted the money, and that he wanted it for the noblest purposes, the severest moralists and the most pious men will be disposed to make some allowance for the error. Our readers are aware that Leo belonged to the illustrious Medici family; he was the son of Lorenzo the Magnificent. The Pope inherited all the generosity and munificence of his kindred. He was a zealous patron of literature, science, and art; but his exchequer was scanty. As it was, the thinkers of his age had no better friend than he; he had always a considerable number of authors and artists from all parts of Europe about him; and none who were in distress appealed to him in vain. He was the first Christian sovereign who sought to advance the cause of science, by opening a correspondence with the principal scientific men of Europe. His efforts extended to the north as well as to the south; instance his extensive and valuable collection of the monuments of ancient Scandinavian history.

Nor did he confine himself to encouraging and honouring authors, artists, and scientific men. In the same enlightened and liberal spirit he founded new universities and libraries, and greatly improved several of the old. He employed French and German as well as Italian savans to collect the lore of antiquity wherever they could find it. Thus it was that he enriched the Vatican with manuscripts, while building the Laurentian library at Florence. As an illustration of the cost of some of these manuscripts, independently of the salaries of those who collected them, suffice it to say that for that of the first five books of Tacitus, he paid five hundred sequins in gold. He established schools for the express purpose of giving instruction in the reading of manuscripts; and the complete editions of the Greek and Latin classics, which he had printed at Rome, are still admired throughout Europe as elegant specimens of typography. He employed the most learned professors that Europe could afford for the Roman colleges, and gave them every possible encouragement. In short, whatever sciences and arts were then known, he had taught by the best teachers at the famous college of the Sapientia.

In addition to all this, he had to build St. Peter's Church,

a work bequeathed to him by Julius II., and the noblest structure ever erected in ancient or modern times for the purposes of religion. Had he accomplished nothing else but this, there is no unprejudiced person, who has seen that magnificent edifice, who would not be disposed to forgive him, even for the sale of indulgences. None could allege that it was for himself he sought the money; but for the benefit of all Christendom—for that of literature, science, and art.

Surely it was as well, even for the poorest, to contribute money for those laudable purposes as to spend it in gaming or other vices, and if, in order to stimulate them, they were told that their departed relatives would be freed from purgatory, the scandal was not very great after all. For our own part, the purgatory of ignorance is as dark and dismal a state of suffering as we have any faith in; and who will deny that the efforts made by Leo X. had a tendency to open that purgatory?

Having thus glanced briefly at what chiefly excited the horror of Luther, we now proceed to show what followed. Although Leo X. ordered the sale of indulgences for the purposes indicated—because it was impossible for him to carry on those great works without large sums of money—yet all agree that Tetzel, the Dominican, who pretended to represent him in Germany, far exceeded his instructions. It is admitted by the biographers of Luther that Teztel was much more concerned about his own coffers, and those of his friends, than about the embarrassments of the Pope. Michelet calls him "an impudent montebank, who went about with great bustle, display, and expence, disposing of his wares in the churches, public squares, and taverns. He pocketed the proceeds, *giving in the smallest return he possibly could.*"*

As a doctor of theology, Luther conceived it his duty to interfere at once. His first step was to call on the bishop of his diocese to stop Tetzel. The reply of the bishop was that he had no authority to do so, and that, in his opinion, Luther, too, had better allow Tetzel to be dealt with as was usual with those who transcended their authority, or abused the confidence reposed in them by their superiors. This not satisfying Luther, he addressed a long letter to the archbishop (a prince of the house of Brandenburg), from which we will quote a passage or two,

* Luther's Life, by Michelet, ch. xi., p. 27.

just sufficient to show the spirit in which it was written. "Venerable brother in God, most illustrious prince, vouchsafe to cast a favourable eye on me, who am but dust and ashes, and to receive my request with pastoral kindness. There is circulated throughout the country, in the name of your grace and lordship, the papal indulgence for the erection of the cathedral of St. Peter's at Rome. I do not so much object to the declarations of the preachers of the indulgence, as to the erroneous idea entertained of it by the poor, simple, and unlearned, who are everywhere openly avowing their fond imaginations on the subject. This pains me, and turns me sick."

Without waiting as much as one day for a reply, Luther affixed his celebrated propositions to the door of the church of the castle of Wittenberg, October 31, 1517. But in these he evinces no disposition to withdraw from the church, as may be seen from an extract or two. "That power," he says, "of extending relief to souls in purgatory, which the Pope can exercise throughout Christendom, belongs to each bishop in his own diocese, each curate in his own parish. * * * Who knows whether all the souls in purgatory would wish to be released? is said to have been asked by St. Severinus."*

It is sufficiently clear from this that, carefully as Luther had studied the Scriptures for years, he was still a firm believer in purgatory. The same propositions show that he was quite aware that the Dominicans had transcended their powers. "Christians," he says, "should be taught that if the Pope were made acquainted with the exactions of the indulgence preachers, he would prefer seeing the basilica of St. Peter's reduced to ashes, to building it with the flesh, fleece, and bones of his sheep."†

Whatever excesses were used by the "indulgence preachers," as long as the people chose to buy what was offered to them—no matter what arguments were used to induce them to do so—the few pence or shillings which each gave could hardly be regarded as their "flesh, fleece, and bones." Be this as it may, Luther still professed implicit faith in the Church and its hierarchy. Although his theses against the sale of indulgences had created quite a sensation throughout Germany, it is evident that he still considered himself a good Roman Catholic. We must either believe this or reject his statements on the subject altogether. After he had spoken and written whatever he

* Meurer, p. 50. † Ib.

thought proper, he sent a copy of all his arguments to the Bishop of Brandenburg, assuring him that it was not his intention to positively affirm or deny anything, but only to investigate and seek information from his superiors. In proof of the sincerity of this statement he begged that the bishop would strike out whatever he saw fit, adding that if the whole pamphlet seemed wrong he might burn it.

At the same time he wrote a letter to the Pope, through Dr. Staupitz (May 30, 1518), which was still more submissive. This is much too long to be quoted in a paper like this; but the concluding remarks will be sufficient. We need only say of the rest that Luther informs the Pope that it was in his name he wrote and spoke as he had done, and that his chief object was to show all how sincerely he respected the power of the Church, &c. "Therefore," he concludes, "most holy father, *I cast myself at thy feet* with all that I have and am. Whether now thou makest alive or killest, decidest for or against, approvest or rejectest, as it seemeth good to thee, I shall acknowledge thy voice *as the voice of Christ, whose viceregent thou art,* and *who speaks through thee.* If I have deserved death, I refuse not to die, for the earth is the Lord's and the fulness thereof. To Him be praise for ever. Amen." To Staupitz he wrote in the same spirit, telling him that he would regard the decision of the Pope as that of Christ.*

In the meantime, however, he continued his disputations until a great commotion was excited. Still the Pope was inclined to regard the whole affair with an indulgent eye; he thought it was nothing more than an ebullition of jealousy between the Dominicans and the Augustinians. In time, however, he was forced to believe that it was necessary for him to adopt energetic measures to restore order and obedience. With this view he requested the Elector of Saxony to send him Luther; on the elector declining to do so he ordered Luther directly to Rome, requiring him to appear at the Vatican within sixty days. The University of Wittenberg interposed in his favour, requesting that the difficulty might be settled at Augsburg by the papal legate. The Pope did not hesitate to assent; nor did Luther fail to appear at Augsburg at the time appointed by the legate. In giving an account of this he says: "When I heard the cardinal pro-

* Meurer, p. 68.

nounce the vow of the Church, which every Christian should venerate I was frightened at first; I promised to be silent, begging that his eminence would at the same time impose silence on all my adversaries."

The cardinal declined to make any conditions; he told him that, from the scandal he had created, the Pope insisted on unconditional retraction. Luther wished to argue and quote Scripture; the legate refused to enter into any discussion; and thus the conference ended. The legate made his report to the Pope, but Leo was still unwilling to have recourse to harsh measures. As a last resort, he charged one of Luther's own countrymen, Cardinal de Meltitz, with the duty of seeking to accomplish what the Italian cardinal had failed in. The new legate entirely disapproved of the conduct of Tetzel. The latter also felt so much chagrin when he saw what trouble his indiscreet zeal had caused, that he is said to have died of a broken heart.

The Cardinal Meltitz had every reason to suppose that his mission had been successful; Luther not only promised him to write another letter of submission to the Pope, but also to publish a sort of manifesto disclaiming all intention of opposing the doctrines of the Church. In his second letter to the Pope, written March, 1519, he uses the following language: "But, now most holy father, I declare, before God, and all his creatures, *I have never wished*, nor do I this day wish in any way, to derogate from the authority of the Roman Church, or of thy holiness, or secretly to plot against it. I much rather confess that the power of this Church *is above all things*, and *that nothing in heaven or on earth is to be exalted above it*, excepting only Jesus Christ the Lord of all. And I earnestly pray thy holiness not to yield a listening ear to those who slanderously speak differently of Luther. And the only things which to my knowledge I can do in this case, I cheerfully promise thy holiness; I shall, namely, in future, suffer this matter of indulgences to rest, and shall keep entirely silent in regard to it (if my opponents will likewise desist from their empty boastings). I shall further cause a writing to be circulated among these people, from which every one shall perceive that the Roman Church is to be sincerely honoured, and that the foolish attempts of these men are not to be laid to its charge; that, moreover, none ought to imitate the severe style of writing against the Roman Church, which I have employed, yea employed quite too much, and in which,

while writing against those declaimers, I proceeded too far."*

Now, be it remembered, this was written nearly seven years after Luther had been made a Doctor of the Holy Scriptures. For at least six years of this time his chief duty had been to preach the Gospel; he tells us himself that he read the Bible day and night, and that there was scarcely a sentence in the Old or New Testament that had any bearing on doctrinal matters which he could not quote from memory. Yet he deliberately declares, in the above letter, that "nothing in heaven or earth is to be exalted above it (the Church), excepting Jesus Christ."

In his public manifesto he is still more explicit if possible. In this he takes up the principal dogmas of the Church and gives his views of them in turn. "It has been alleged," he says, "that I wish to abolish prayers to the holy saints. I declare to you, in common with all Christendom, that we ought to revere and invoke the saints; but in invoking them we should rather ask them for spiritual benefits than for material benefits." Of purgatory he speaks in similar terms. "It has been said that I wished to abolish the belief in purgatory. I declare to you, on the contrary, that it is necessary for us to believe it. It is certain that the poor souls in purgatory suffer infernal torments, and that, in order to relieve them, we should pray, fast, and give alms, &c."

Finally he speaks of the Church as a whole. "There can be no doubt," he says, "that the Roman Church is under the especial protection of God; the apostles Peter and Paul, sixty-four popes, and several hundred martyrs have shed their blood for her. If certain things take place at Rome now which ought not, this is no reason why we should separate from her. On the contrary, the more abuses are patent, the more we should prove our attachment to Rome; for a schism would bring no remedy. We must not abandon God to the cause of the devil; nor the good for the cause of the wicked. For nothing in this world must we trouble the unity of the Church."†

It will be admitted that the Pope himself could scarcely have issued a more orthodox manifesto, than that from which these extracts are taken; it was entirely in accordance with his letters to the Pope. But in all cases his promises

* Meurer, p. 107. † Loscher, ii., ch. 16; Meurer, p. 109.

were more or less conditional; he pledged himself, again and again, that he was willing to do all that was required of him, by the friends of the Church, provided his adversaries would not claim that they had conquered him.

This was the difficulty. If there were errors in the Church he could overlook them easily enough; but he could not overlook errors attributed to himself. It was less harm, he thought, that the Church should be wrong than that he should be mistaken in his views, or "conquered" as a disputant. Accordingly, he soon forgot all his love and veneration for the ancient faith. Dr. Eck, Professor of Theology at Ingolstadt, made some criticisms on his friend and disciple, Dr. Karlstadt, in a pamphlet entitled *Obelisci*, and this was more than he could submit to, especially as Eck attacked himself as well as his disciple. Luther immediately replied in another pamphlet entitled *Asterisci*, and thus was brought about the celebrated Leipsic disputation, which lasted from the 27th of June to the 13th of July, 1519. For the first week the dispute was between Eck and Karlstadt, but for the remainder of the time it was between Luther and Eck. Towards the close, argument had degenerated into abuse; Luther became so much irritated, that he called his opponents very uncomplimentary and not very pious names.*

After the disputation, Dr. Eck went to Rome; but he soon returned with a bull of excommunication against Luther. It was not as a proof of his success, however, that he got this; but Luther had now begun to preach, write, and publish against the Pope himself. Once more he wrote his holiness a letter, but this time it was one of advice and instruction; and before it had time to reach Rome, Luther's pamphlet, "Concerning the Babylonian Captivity of the Church," had made its appearance in print. In this the Pope was openly assailed, and so were most of the dogmas of the Church. After Luther had criticised the bull to his satisfaction he collected a large crowd, chiefly students, in one of the public squares of Wittenberg, had a large fire kindled, and the bull burned. Next day he preached a sermon, in which he informed his hearers that it was high time that Rome itself, with all its doctrines and abominations, were also consumed in the flames.† "If you do not," he says, "with all your heart oppose the wicked government of the Pope, you cannot be saved. For the kingdom of the Pope is so

* Luther called Eck a goat (hircus), the same as he afterwards compared the Pope and Henry VIII. to a donkey—asinus asinum fricat.—*Luther's Works*, vol. ii., 277.

† Meurer, p. 180.

utterly opposed to the kingdom of Christ and to Christian life, that it would be better and more safe to live in a wilderness, without any human being near, than in and under the kingdom of Anti-Christ."*

Yet no violent measures were pursued towards the heretic. The worst that was done was to induce the Emperor Charles V. to write to the Elector of Saxony to bring Luther with him to Worms, in order "there to have his affair investigated by learned and highly intelligent men, and to see to it *that he would sustain no injury or any ill-treatment.*"† The elector not wishing to be responsible in any manner for the conduct of Luther, the emperor sent his herald for him to Wittenberg, with a citation commencing thus: "Honourable, beloved, and devout, whereas, we, and the estates of the holy Roman empire now here assembled, have concluded and resolved to receive information concerning the doctrines and the books for some time past published by thee, we have, to enable thee to come hither and to return again in safety to thy home, given and freely offered thee our safe conduct and that of the empire, which we herewith transmit to thee."

It must be admitted that there was nothing very despotic, intolerant, or bigoted in all this. Luther made his appearance before the Diet in due time. Before any question had been asked of him, the emperor directed to have counsel assigned him; and, on his hesitating to reply, he was allowed another day to reflect on the answer he might make. In the meantime he was conducted to his lodgings by the imperial herald, so as to make sure that nothing would happen to him. The next day he appeared again. All he was asked was, Firstly, whether he acknowledged his books, secondly, whether he would disclaim what is contained in them against the Church, or whether he would abide by them and maintain them. Seeing that no force or threats were used, he concluded his reply to the Diet as follows: "I cannot and will not recant, because it is neither safe nor advisable to do anything against conscience. Here I stand, I cannot do otherwise, so help me God. Amen."

After a brief consultation between the emperor, electors, and other members of the Diet, Luther was informed that he might withdraw; two men were sent with him by order of the emperor to conduct him safe to his lodgings. The next

* Meurer, p. 180. † Ib., p. 188.

day he was invited by the Archbishop of Treves, who hoped to be able to induce him to cease his attacks on the Church. Finding all his arguments in vain, the Archbishop said, "My dear Doctor, what is to done, then?" Luther replied with a text from Scripture, and we are told by his most zealous biographers that the archbishop, now perceiving that he would on no account submit, "graciously dismissed him."* Luther was so well satisfied that the kindness of the archbishop towards him was no affectation, he appealed to him as follows: "Most gracious lord, I pray your electoral grace to obtain for me, from his imperial majesty, gracious permission to return to my home, for I am now here the tenth day, and nothing has been accomplished with me."† The Archbishop of Treves did not hesitate for a moment; but ordered his horse and rode in person to the emperor. "And in truth," says Meurer, "not fully three hours after the conversation with the archbishop, the official of Treves, and with him his imperial majesty's secretary, besides a notary, and several other persons arrived.‡

These distinguished personages did not come to reproach or revile him, but to grant him, in the name of the emperor, and in the most courteous manner, all he desired. No sovereign could have been treated with more consideration, although they were all Catholics who treated him so. All regarded him as a heretic of the most dangerous kind, but they respected his learning and genius, and took every necessary precaution to protect him from insult and injury. Luther himself was not insensible to the friendly and benevolent feeling thus evinced towards him; on the message of the emperor, which guaranteed to him full protection, being delivered to him, he replied: "I most humbly and faithfully thank his imperial Roman majesty, the electors, and the estates of the holy empire, for hearing me so graciously, and so graciously observing to me my safe conduct."§

The protection accorded to him on his return was on the express condition that he should not, on his way, by preaching or writing, *cause disturbance among the people.* It seems that he forgot this, for there was scarcely a town he passed through in which he did not both speak and write against the Pope and the Church. As this seemed likely to create

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* Meurer, p. 206. † Ib. ‡ Ib.
§ Hutten's Let. in Hall ed. of Luther's Works; Meurer, 209; Spalat, Annal., p. 41.

disturbance, he was privately taken to the Château of Wartlung, where he was retained for some time. It seems that he was rather favourable to this course himself, as he was scarcely under any restraint, being allowed to ride out whenever he wished to visit the neighbouring convents and colleges, and to write and publish whatever he thought proper. He did not remain long, however, but soon returned to Wittenberg. The emperor issued an edict against himself and his books soon after, warning all good subjects against having anything to do with either, on pain of being considered guilty of high treason. Luther told his friends that there was no harm in this; that its object was simply to frighten them and induce them to return to the old faith. This proved true; no one was punished for his opinions; Luther was permitted to preach, write, and publish until the new religion was adopted more or less generally, not only throughout Germany, but also in Denmark, Sweden, England, and, to someextent, in France.

Nothing is clearer from all this than that it was his love of disputation that caused Luther to separate from the Church of Rome. Had other theologians not opposed him, there would have been no schism. In attacking the sale of indulgences he meant nothing more, at the outset, than to bring the Dominicans into discredit, they being the rivals of the brotherhood to which he belonged himself. That he was a powerful speaker there can be no doubt; it may well be questioned whether there has ever existed a more eloquent preacher. His eloquence, it is true, was of a rather coarse character; for no language was too rude or too offensive for him to use to his opponents. But this was exactly the kind that suited the masses of his time; and it was these, and not the upper classes, which he had to convince in order to succeed.

It is too generally forgotten that in every country that embraced the new religion the ruling class were very glad of a change which would put money into their empty coffers. Most of the German princes were proverbially poor, while the monasteries had much wealth. Nor is it fair to pretend that this wealth was not legitimately obtained. The monks were not the lazy, indolent people which it is now so much the fashion to represent them; they were not only the best instructors of youth; they were also the best cultivators of the soil. Sometimes they bought large tracts of land which they got for a price little more

than nominal; at other times they received grants of land from great lords, who wished them to establish their schools on their property. In neither case was the land worth much, in general, when they got it; but they were constantly improving it, until its value increased a hundred fold. In the meantime they received bequests from wealthy men, whose sons they had educated. This enabled them to enlarge their schools, and to increase the number of pupils, who, on account of their poverty, received their tuition gratis.

We read also that many of the bishops and archbishops were men of princely wealth; but in doing so we seldom remember that those dignitaries belonged to princely families, and that they often lost more wealth than they gained by their position in the Church. Bishops and archbishops, who had not inherited their wealth in this way, were, in general, far from being rich; many of them were as poor as curates are at the present day. Others received their chief support, not from the different parishes of their diocese, but from the colleges and universities in which they performed the duties of professors. Many of those who subsequently became popes earned their bread in this way.

The nunneries became wealthy in a manner equally honourable. Even Luther could not deny that they were good women; when he determined to marry he had more confidence in finding virtue in a nun than in any other woman, and he always boasted that his expectations in this respect were more than realized by Catharine von Bora. It is easy to understand that ladies who were proverbial for their self-sacrificing goodness—dividing their time between teaching the children of the poor and visiting and relieving the sick and destitute—would receive large bequests, in a chivalrous age, from pious men who had an excess of wealth. Accordingly, the nunneries became rich as well as the monasteries—that is, their capacities for doing good was increased.

Is it strange, then, that Luther found many princes, dukes, landgraves, &c., who were very willing to agree with him that the nunneries and monasteries ought to be confiscated. Henry VIII., of England, did not understand this part of the work at the beginning; therefore, he did not want any reformation. On the contrary, he wrote against Luther, and in defence of the Church; but when he saw that, by adopting the new religion, he would have a pretext for seizing on the revenues of the Church, as well as the convents, and that, since the re-

formers of Germany allowed the Landgrave of Hesse to marry a second wife, the first being still living with him, there was no good reason why he should not be allowed to marry Anna Boylen, and put away Catharine of Arragon, in defiance of the Pope—then he saw the whole affair in a different light, and became, all of a sudden, as great a reformer as Luther himself.*

As for the statement that the Church had fallen into gross ignorance and superstition in Luther's time it is one that cannot be sustained by any respectable authority. There is no intelligent life of Luther, no matter by whom written, which does not refute the charge by merely stating the necessary facts. It must be borne in mind that Erasmus, who was twenty years the senior of Luther, was a much more profound scholar than the latter. Erasmus also was educated by those ignorant monks; nay, he was a monk himself. He had translated the Testament, and recomended its general study, before ever Luther had thought of doing one or the other. It was while he was a member of the convent of Emaus that he wrote his celebrated Latin treatise *De Contemtu Mundi*. From this institution he was recommended to the Bishop of Cambray as a travelling companion. The Bishop ordained him a priest, and not only gave him permission to finish his education at Paris, but gave him the pecuniary means to do so. No scholar of any age studied the Bible more carefully than Erasmus; and the one who, above all others, encouraged him most to do so, was the professor of theology at Louvain University, who afterwards became Pope, under the title of Adrian VI. The fame of Erasmus, both as a classical and biblical scholar, extended to every country in Europe. The Universities of Oxford and Cambridge vied with each other in honouring him.

* The wordy fight between the two Reformers is one of the most curious that history records; but Henry VIII. was gentle and courteous compared to Luther. The former complained to the Elector of Saxony of the gross abuse which he received. The Elector merely mentioned the matter to Luther, who, lest any harm might come of it, took up his pen and wrote as humble an apology as ever was made, even by a slave to his master. The man whom he styled an ass (asinus) only a few months previously, he now addresses as follows: "Most serene king! most illustrious prince! I should be afraid to address your majesty when I remember how much I must have offended you in the book which, *under the influence of bad advice*, I published against you, *through pride and vanity*. * * *I blush now and scarcely dare to raise my eyes to you*—I who, by means of these workers *of iniquity*, have not feared to insult so great a prince, &c. ° ° If your majesty thinks proper that in another work I should recall my words, *and glorify your name*, vouchsafe to transmit me your orders, &c."—*Luther's Works*, vol. ix., p. 234.

And Erasmus was also a reformer. In his *Morias Enconicum*,* he attacked several abuses which had crept into the Church, sparing neither monks, nor bishops, nor cardinals, but treating all as he thought their backslidings deserved; he had entered the field twenty years before Luther; and for many years the latter was his disciple. But there was this difference between them: one attacked the discipline of the Church only;† the other was not content with this, but attacked its dogmas also. When Luther went thus far, Erasmus declined to have any connection with him in future; this enraged the former, so that no one, not even the Pope himself, was more violently assailed by Luther than Erasmus. It was in vain the latter wrote him letters full of kindness and good sense, urging him to discard violence and observe moderation in his disputations. In return, Luther published several pamphlets, assailing him with the utmost bitterness. Among his private friends he evinced the same feeling of hatred; thus, in his "Table Talk," he says: "Erasmus, of Rotterdam, is the

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* Elegy on Folly.

† The most enlightened dignitaries of the Church did not deny that there were abuses; several of the Popes, including Leo X and Adrian VI, admitted the fact. Those who claimed that everything connected with the Church was infallible, or faultless, were very few; these were, indeed superstitious and narrow-minded, and, accordingly, their views were regarded as of no account. It should be borne in mind that, after Luther had done his worst against the Church, after he had denounced the Pope as Anti-Christ, and abused him as if he had been a convict who had escaped from justice, cardinals and archbishops continued to correspond with him, and to invite him to their table. This attention was shown him so late as the time of Paul III.

Paul Vergerius, the learned and enlightened legate of this pontiff, invited Luther and his friend and disciple, Bugenhagen, to breakfast with him at the Castle of Wittenberg, in August, 1535. Nor did either decline to accept his polite invitation (Meurer, p. 409). Less enlightened men than Cardinal Vergerius would have thought it an abomination—worse, if possible, than the sin against the Holy Ghost—to have breakfasted with so terrible a heretic; and yet we fear that there are more at the present day who would have regarded it in this light than there were then. But dignitaries who are qualified for their position have been liberal in all ages, and would not deny that abuses had crept into the Church in Luther's time. In order to illustrate this, we need not go beyond our own country. Of the several histories of the Reformation which we have read, there is not one that is written in a fairer or more conciliatory spirit than that of the Catholic Archbishop of Baltimore. Dr. Spalding, who is an accomplished scholar as well as a theologian and author, does not deny that there were abuses, nor does he pretend that it was a mortal sin to point out those abuses and seek to remedy them, as may be seen from the following remarks:

"Had he paused at the proper time, had he continued to leave untouched the venerable landmarks of Catholic faith, and confined himself to the *correction of local disorders*, all Catholics would have applauded his zeal. Instead of being reckoned with Arius, Pelagius, Wickliffe, and other heresiarchs, he would then have found a niche in the temple of Catholic fame with an Ambrose, a

vilest miscreant that ever disgraced the earth."* Further on, in the same page, he says: "Shame upon thee, accursed wretch! 'Tis a mere Momus making his vows, and mocks at everything and everybody, at God and man, at Papist and Protestant," &c.†

We will mention one other illustrious person who was also the senior of Luther. Copernicus, the great founder of the present system of astronomy, was born just ten years before Luther. He, too, was a priest who had been educated by monks; his uncle, the Bishop of Warnie, not only directed his studies, but paid his fees at the college of Thorn, and subsequently enabled him to travel into Italy and other countries to finish his education. He made no noise in the world; but he devoted at least thirty-five years to his immortal work.* When it was finished it was Cardinal Schomberg, the Bishop of Kulm, and other monkish friends that induced him to publish it; and, far from apprehending that the Pope would persecute him for representing that the earth moved, he dedicated it to Paul III., the last of the four popes that reigned in Luther's time. He was seventy years old when the work was printed; and he only lived a few days after his disciple Rheticus put a copy of it into his hand.

Now such was the popish ignorance, superstition, and degradation which prevailed in Luther's time; and it was also the time of Angelo, Raphael, and Machiavilli, as well as of Camoens, Cervantes, Tasso, and a host of others. That there were superstitious people in those days is doubtless very true; but if there were any of the educated class more so than Luther, we have never read their history. We do not seek to disparage him on this account; we refer to his case rather to show that one may be very learned and very

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Gregory VII., and a Bernard! His great talents, properly regulated, might have been immensely beneficial to the Church of God. But, standing on the brink of a precipice, he became dizzy, and fell; and, like Lucifer of old, he drew after him one-third of the stars of God's kingdom on earth. The old Catholic tree *bore some evil fruits of abuses*—generally local and unauthorized, as we shall see in the proper place—and instead of pruning it discretly and nurturing its growth, he recklessly lopped off all its branches, and even attempted to tear it up by the roots, under the pretext, forsooth, of making it bear fruit!"—*The Hist. of the Prot. Refor. in Germany and Switzerland*, &c., &c., in 2 vols, 8vo. By J. M. Spalding, D. D.

* Section DCLXXI.

† Luther's Table Talk, translated by Hazlitt. Bogue's edition, London, p. 288.

* De Revolutionibus Corporum Celestium.

eloquent, and at the same time be superstitious. Thus, for example, we think it may well be questioned whether any monk, before or after Luther's time, has had so strong a faith in the devil as the great Reformer, for the latter fancied himself in constant *rapport* with his satanic majesty. He talked and argued Scripture with him for hours—often for whole days. Sometimes the devil provoked him so much with his sharp logic, that the Reformer got into a fight with him; once he threw his ink-bottle at the devil's head, and the mark of it is said to be in the wall where it struck to this day; although it does not appear that the devil was less voluble after, than he was before, the attack.

But let us hear Luther himself, for he gives us whole chapters on the subject. "Once," he says, "in our monastery at Wittenberg, I very distinctly heard the devil making a noise. As I was beginning to read the Psalter after singing matins, and had sat down, and was about to study and write for my lecture, the devil came and thrice made a noise behind my stove, as if he would have dragged it away."* Another time the devil was taking away "a young girl who was the mistress of an old miser at Wittenberg;" the way Luther saved her was to spit in the devil's face. Such was the efficacy of this spit that his satanic majesty was instantly turned into a serpent, who bit the girl's ear and then disappeared!†

Luther regarded many diseases as simply the work of the devil. "The crazed, the halt, the blind," he says, "are all possessed with demons. Physicians, who treat these infirmities as arising from natural causes, are *fools*, who know not the mighty power of the devil."‡ Again, he tells us how the devil bought a young scapegrace at a tavern, and, on the conditions being fulfilled, carried him with him through the ceiling, while many were looking on; although if Luther had been there he need only have spit at Satan.§ When the good Puritans were burning witches at Salem and other parts of the world, there was scarcely a step they took in their ceremonies in which they were not sustained by the authority of Luther. "Eight years ago," he says, "I myself saw and touched a child at Dessau *that had no parents, and had come of the devil.* He was twelve years old, and altogether like any other child. He

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* Life of Luther, by Michelet, p. 220. See Table Talk, *passim.*
† Ib. ‡ Ib. § Ib.

did nothing but eat, and could eat as much as any four working men. * * I observed to the Prince of Anhalt: 'Were I in authority here, I would have that child thrown into the Moldau, and run the risk of committing murder.' But the Elector of Saxony and the Princes thought differently."

Was it not fortunate for the poor child that they did? Luther would have all children or adults similarly affected disposed of in the same summary manner, because, he says, he believed them to be nothing more than a soulless lump of flesh. Speaking of the attemps of Satan on himself, he says: "The devil presses me so hard in dispute that I break out into a sweat. I am kept conscious of his constant animosity. He lies closer to me than my Catharine (his wife), and troubles me more than she joys me." A page or two farther on he gives us the following additional information: "Of a night, when I awake, the devil soon comes and begins arguing with me, and putting strange thoughts into my head, until I fly into a passion, and say, 'Kiss my ——!' "* &c., &c.

We could quote sufficient of this sort of information from Luther to fill twice as many pages as we can devote to this whole article—nay, sufficient to fill every page in this whole number of our journal. But we think we have given quite enough to show that if there was any "papist" monk or friar who was more superstitious than our great Reformer, he must have been very much so, indeed.

But we are told that if Luther's connection with the devil was somewhat closer than it is pleasant to own, he was the first to teach others how to use their reason. Our own attention has often been called to this; but we could not accept it. There is no greater mistake than to suppose that Luther was in favour of our putting any confidence in our reason in spiritual matters; no one was ever more in favour of the opposite course. Dr. Henning, knowing how much Luther inveighed against reason, asks him one day, "Is reason to hold no authority at all with Christians, since it is to be set aside in matters of faith?" Luther replied, "Before faith and the knowledge of God, reason is mere darkness," &c.† The very last sermon that Luther delivered (January 17, 1545) may be regarded as a philippic against human reason. A brief passage or two from this eloquent but singular address will sufficiently indicate its character. "It is necessary that the preacher should frequently warn us lest

* Michelet, p. 228. † Table Talk, p. 34.

reason should seduce us. Every one knows that luxury, drunkenness, and adultery are sins; but reason, *ratio*, that *betrothed of the devil*, that *fine prostitute*, walks with head erect and pretends, with an air of sufficiency, that all she advances is as if dictated by the Holy Spirit. * * Once more reason is the greatest w—— (*Hure*) of the devil. * * Reason is a ferocious beast, which does not permit itself to be easily captured. Be on your guard against that prostitute; keep her at a distance, and, instead of following her thoughts, throw mud in her face, &c., &c.*

If ever priests, monks, bishops, or popes, ancient or modern, have spoken of God's noblest gift to man in such depreciating language as this, we are not aware of the fact; we have never found such language recorded of any one but Luther.

We are also told how great was his love for the sciences, but no one who thought like him, or who set so low an estimate on the reasoning faculty ever entertained such love. It is true that he occasionally speaks of the sciences in his Table Talk, but always in rather a crude manner. The antediluvians, he tells us, were a very learned people, far more so than we of modern times are, because the people lived so long before the time of Noah that they could not have failed to acquire a vast amount of knowedge. But now, he says, "God will not have that we should attain a higher knowledge of things."†

He speaks of astronomy in high terms, and proceeds to explain its nature. "Heaven's motions," he says, "are threefold; the first is that the whole firmament moves swiftly round, every moment thousands of leagues, *which, doubtless, is done by some angel.* 'Tis wonderful so great a vault should go about in so short a time. If the sun and stars were composed of iron, steel, silver, or gold, they must needs suddenly melt in so swift a course, for one star is greater than the whole earth, and yet they are innumerable. The second motion is of the planets, which have their particular and proper motions. The third is a quaking or a trembling motion, lately discovered, *but uncertain.*"‡

This, although rather defective, is quite as good scientific logic as we have a right to expect from one who regards reason in turn as a wild beast and a prostitute that deserves

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* Zimmerman, tome iv., pp. 88-9. † Table Talk, p. 65.
‡ Table Talk, p. 246.

to have dirt thrown in her face. At all events, it is very different from the logic of Father Nicholas Copernicus on the same subject. The latter has proved to the world that he could be a good priest, and a pious man, and at the same time put much confidence in his reason. It is no part of our design, however, to disparage Luther; our object in presenting the different phases of his character is merely to show that, while he was undoubtedly a man of genius, there was certainly nothing in his conduct, or in his writings, which any unprejudiced person should regard as a sufficient cause of dividing Christianity into different sects.

And if this be admitted, it must also be admitted that he has shown no good reason why those different sects—at least the most moderate of them, should not unite again. We may consider the life and writings of Calvin, and other Reformers, perhaps including Henry VIII., in a future number with the same view; but if we cannot see from the works of Luther, who was the Reformer in Chief, that Christians should be divided into a score or more of sects, each more or less hostile to all the rest, we can hardly be convinced by his brethren or disciples.

Although we have merely glanced at the subject in this paper, we think we have shown, from Luther's own testimony, and that of his most zealous Protestant biographers—without one word from any Catholic historian—that, after all, the old Church was a pretty respectable institution, even when the great Reformer first began to fulminate his denunciations against it. Nay, we fear that all our Protestant churches put together could not present so many learned men, or so many profound thinkers at the present day, as the Church of Rome did at the beginning of the sixteenth century.

The secret of Luther's success did not consist in the errors of the old church, or in his superior knowledge of Scripture, and the eloquence and earnestness with which he communicated that knowledge; but in the printing press, which was then a novelty, and, consequently, an attraction to the masses. All who knew how, read then with avidity. The multitude are never very critical as to what they should receive or reject; but they were particularly ready then to receive new impressions, and we have shown that it was the interest of the ruling classes—those who were not so credulous—to encourage an innovation which would enable them to replenish their nearly exhausted treasuries.

ART. VII.—1. *Parcival. Rittergedicht von Wolfram von Eschenbach. Uebersetzt und erläutert von* DR. K. SIMROCK. *Dritte Ausgabe.* J. G. COTTA. Stuttgart & Augsburg.

2. VILMAR'S *Literatur-Geschichte. Elfte Auflage.* Marburg & Leipsig.

3. GERVINIUS. *Geschichte der deutschen Dichtung.* 7 vols. Leipsig.

THE darkness, which for so many centuries rested upon the achievements of the middle ages, on the fields of literature and general culture, had at last been sufficiently dissipated to do away forever with the conceit which regarded that period as one of saddest ignorance and barbarism, from which our wonderful era has sprung as if by a miracle. The only question now is, whether our literature and culture are so very far in advance of that era of "darkness and superstition?" It is not the gothic architecture alone, any longer, which looms up out of those middle ages with its proud, heaven-ascending spires, but likewise a gothic philosophy and a gothic poetry of equal grandeur and daring. In Erdmann's recent *History of Philosophy*, the philosophers of those "dark ages" have assigned to them double the space devoted to the philosophy of the bright classic age; and popular editions of the German poets of the middle ages are beginning to find as rapid a sale in Germany as those of the poets of Greece and Rome.

It is a doubtful question now-a-days, with German literary critics, whether Goethe's *Faust* or Wolfram von Eschenbach's *Parcival*, be the greater poetical work of art, so far as such a comparison can be instituted between an epic poem and a tragedy; whilst it is universally acknowledged that the second period of German literature has produced no humourist who can in the least compare with Johann Fischart, or Fischartum, as old Burton calls him, whose writings are again becoming as popular as they were in his own times, when edition after edition of his various works could but ill supply the demand, and when crowds thronged the printing-houses on their first day of publication. It is true that Fischart, the contemporary of Luther, is not properly a man of the "dark ages." But the *Parcival* is certainly a true production of that much abused

epoch, and its extraordinary merit as a work of art, and the many editions of the various translations of it, bear indisputable witness. A book like this cannot be made popular, it must have true popular element—art-spirit—in it, or it perishes like other inferior productions.

This popular element, this high-art value, the poem of "Parcival" possesses, both in regard to its form and contents. As regards the latter, it has been properly compared to "Faust." There is somewhat of the Faust-element in it. It is the story of Faust before the Faust saga had originated, of a Faust not clad as yet in the gloomy raiments of a worn-out student, but in the knightly fashion of Sir Amadis. Instead of the pale alchemist, we have a valourous knight, the bravest of the brave. Instead of a search for abstract knowledge and wild sensual pleasure, we have a search for a tangible reality, for the actual, visible Divine itself, for the holy Graal; and instead of the external mediation of the holy Virgin, we have the internal mediation of purification of the heart. Se-Parcival, the child-like, innocent, implicitly faithful, dreamy boy, who, by his holy mission, is favoured to see the St. Graal, but, from a foolish concession to worldly teachings, fails to become its chosen king and protector, and who, thereupon, having learned the value of what he has spurned, must reconquer it and his worthiness to its protectorship, through many years of hard struggle and knightly adventures, is certainly a very different person from Johannes Faust, the jolly magician, or from Doctor Faust, the melan holy student of sciences; but, nevertheless, he is a Faust in that he is in search for the solution to the world-riddle; and it is this mystic search which gives the work its popularity.

As regards the form of "Parcival," it is that of an epic poem, and, as such, executed with great artistic skill, so far as the working out of the story and the connection of the parts into a whole are conerned; but it is deficient in beauty of metre, rhyme, melody, and style, wherein it falls sadly behind Dante's great poem, of which "Parcival" was the forerunner, and with which it is, in all other respects, worthy of comparison.

To properly appreciate this great work of the twelfth century, it will be necessary to dwell somewhat at length on the material which that age offered to the poet for his poem, for it is only by comparing the work of an artist with the crude material used for its construction, that we shall

be able to form a proper estimation of the power of the artist as such.

Two vast collections of sagas had been established at that time, and gathered around two of the world's greatest men—King Arthur and the Emperor Charlemagne. The literary excitement produced by the appearance of Geoffrey of Monmouth's *Chronicles*, as well as the warlike character of the times and the movements of the crusaders, had scattered these romances over all Europe, and caused them to be intermixed with the legends and traditions of other nations. Thus it happened, for instance, that two strangers —Sir Tristram and Sir Parcival—were added to the list of the Knights of the Round Table; for originally neither the story of Tristram and Isold, nor the legend of Sir Parcival and the St. Graal, had connection with the story of King Arthur and his court. In the north of France particularly, where the French and the British met, the legends attached to King Arthur and to Charlemagne so interpenetrated each other, as often to be no longer distinguishable.

One fundamental distinction, however, always remains recognizable; a distinction, which accounts fully for the greater popularity enjoyed by the King Arthur legends, and which also explains, why Ariosto's famous poem, which celebrates the heroes of Charlemagne, has never become universally popular. This distinction is, moreover, curious in that it reverses the usual opinion respecting Northern and Southern characters, for it is the story of Charlemagne, which deals almost exclusively in adventures of prowess, of fights and battles; whereas the romance of King Arthur is constantly lit up by tales of love and of amorous passion. That, which is perhaps the only true historical moment of the Arthur legends, namely, the infidelity of his wife, has given thus, as it would seem, a colour to them, which made them the favourite romances of the people; for the sexual relations—of all human relations the most important—is also that which most interests in art. This love-colour of the Arthur legends, Tennyson, in his version, has likewise laid the principal stress upon. But while he thus remained true to the original character of these legends he sacrificed the interest of art. A great artist would have made Sir Parcival and his search for the St. Graal the centre of those adventures which Tennyson has merely strung together without

central unity. Tennyson's legends leave Prince Hamlet out. It is Eschenbach's great merit that he has arranged the adventures of the brilliant knights of those legends in such a manner as to group them around the mystic central figure of Sir Parcival, who rides sadly over the world in search of that which is visible only to the pure of heart.

We have said that the figure of Sir Parcival did not originally belong to the Knights of the Round Table. Indeed, a mere glimpse at him, as he appears in the modern legend, shows his foreign character. His clumsiness, his fool's dress, his outspoken naiveté, his earnestness, his ignorance of wordly manners, and childish faith, his dreamy-revery over the spots of blood—all this is utterly unlike the manners of the other knights; it has a German characteristic. The truth of it is, that Sir Parcival is an historical figure, like King Arthur, and that when he became legendary, many circumtances of old stories and traditions were attached to his history, and with such embellishments he was finally introduced into the ranks of the Round Table.

These legendary traits, which meet us constantly in the story of Sir Parcival, are easily traced. He is one of those favourite heroes of old Mother Goose stories, who are wise from sheer stupidity, whose frankness makes impropriety eminently proper, whose childish answers are more to the purpose than the wisdom of the learned, and whose general topsy-turviness of worldly behaviour and speech finally destroys the spell of some beautiful princess, by causing her to laugh, which she had not been able to do for many years. By means of these embellishments, the romantic Sir Parcival was created out of a certain Morvan Lez Breiz, of Brittany, who lived in the ninth century, and is celebrated in numerous ballads as the hero of many fights against Louis the Pious. The ballads tell how young Morvan was raised by his mother in strict seclusion from the world—she intending to keep him ignorant of its turmoils and battles—but how the child once went into the forest, and there met a knight, whom it took to be an angel; how the knight spoke kindly to the child, and thus awakened in the boy's heart a passionate desire for knightly adventures; how, finally, the boy ran away from home, and became the successful knight known in history. But when, after ten years of adventure, he returned to his home, he found that his mother had died of a broken heart.

These few circumstances—all of which we meet again in the story of Parcival—will show how natural it was for legendary lore to connect Morvan, the boy so ignorant of the world, and yet so evidently longing to become a knight-errant, with the glorious Round Table, and to attribute many circumstances, ascribed in immemorial fairy tales to marvellous simpletons, to this simple-hearted hero. In this, his earliest legendary shape, we meet Morvan in some old English manuscripts as Parcival the Crusader, who died in the Holy Land; and in the Welsh Mabinogian as Peredur, the son of Evrawc.

The question now remains—and it is one which has puzzled innumerable commentators, though it will probably not be decided until many manuscripts, which bear on the subject, and are rotting in libraries, have been made public—how did the legend of the St. Graal come to be connected with Sir Parcival, and through him with the Round Table; and what is this wonderful legend, which throws over that gay and worldly period of knight-errantry such a mystic shade of religious significance?

The story of the St. Graal appears to have a heathenish origin. There seems no doubt that it was brought to the Christians in Spain through the Arabs. It thus presents a curious compound of Pagan, Oriental, Jewish, and Christian elements. It is the legend of a rescued gem from the traditionary golden age or paradise; from that period of life when the mere wish had causality in the external world, and when eternal youth held aloof all internal suffering. Various are the forms which this gem assumes in the tradition of later ages. Now it is an *heliotrapezon*, now the elixir of life, now the philosopher's stone, now a jewel struck by St. Michael out of the crown of Lucifer, and guarded by angels in the empty heavens; now the dish upon which the daughter of Herod brought the head of St. John the Baptist because he would not return her love, as tradition says; and now again, a mere pure gem of wonderful brilliancy. It is only in the very last stage of the Graal saga, that the St. Graal was made to be the cup with which our Lord instituted the last supper, and which Joseph of Arimathea, the apostle of Great Britain, had brought with him after having filled it at the cross with the blood of the Saviour.

In all probability it was owing to the rites of the secret order of the Templars that the dish with the bloody head of

the Baptist (a dish which occurs in the Welsh story of Peredur), was changed into the St. Graal, and was now supposed to have derived from the blood of St. John—as Joseph's cup from the Saviour's blood—that peculiar virtue of keeping away death, banishing pain, and keeping up life without the requirement of food, which belonged to the legendary St. Graal. Indeed, St. John the Baptist had been for many centuries the object of popular superstition and of worship in the East (where a large body of Christians, bearing his name, still existed at the time of Eschenbach, and with which body Eschenbach therefore connects the Graal saga again), and the glass dish, which was said to have held his head, being taken by the Genoese at the capture of Cæsarea, was dedicated by them to the temple of St. John the Baptist, where it may still be seen, and is now called *il sacro catino.*

We shall not attempt to settle this whole vexed question. Suffice it to know that at the time of Eschenbach the saga of the St. Graal was the saga of a divine reality (cup, gem, or dish), which God had vouchsafed to man as a special means of grace; and that the servants or guardians of this holy relic were held in popular tradition to be a priesthood of knights (the Knights of the St. Graal, also called Templar Knights), selected from the noblest and most virtuous of men by the St. Graal itself. Who, then, were these favoured mortals, the mighty race of the kings of the St. Graal? This question arises naturally in connecting historical personages with that priesthood, and Eschenbach answers it thus, professing to have taken his story of Parcival from the Provençal poet Kiot: Kiot, says Eschenbach, a Provençal poet, was the first who wrote the saga of the St. Graal, and he took it from the Arabic manuscript of a heathen (Flagetanis), which manuscript Kiot found in the library of Toledo, the city which was at that time the seat of learning in Europe. But Flagetanis did not mention the names of the favoured mortals who had been chosen for the guardianship of the St. Graal, and hence Kiot, prompted by laudable curiosity, proceeded to institute a search in the chronicles of the various kingdoms of Europe. He searched in vain the chronicles of Ireland, Brittany, and France, but finally discovered a trace of the kingly race in the chronicles of Anjou.

The Anjou chronicle stated the following: Parill, son of

Sennabar, having married Argusilia, daughter of Vespasian, received from the emperor, as marriage gift, the kingdom of France, and, as a present for his brother, Anjou and Cornwall. His son, Titurison, married Elizabeth of Arago, and by her had a child, Titurel, who grew up to be a man of such noble, good, and truly Christian character, that the angels, who had hitherto kept the St. Graal in the Orient, brought it to him and confided it to his keeping, thus making him the first European historical king of the St. Graal; whereupon Titurel built for the St. Graal, near Salvaterra, in the Pyrenees, that famous temple, the description of which exhausts all the splendour of gothic architecture, and according to which description Charles IV. built the wonderful chapel or castle Carlstein, near Prague.

The temple was built in circular form, about five hundred feet in diameter. Seventy-two octagon chapels surrounded it, each two of which were surmounted by a tower. Thus there arose around and over the temple thirty-six large six-story towers, with winding staircases; whilst from the centre of the building there arose another tower, of double the heighth and size of the others. The temple was arched, the arch resting on pillars made of iron and ornamented with gold and pearls. The arches were of blue saphhire, but in the centre a large emerald had been set, enamelled with a lamb and the crusaders' flag. All the altars were built of blue sapphire—the symbol of redemption from sin—and were covered with green velvet. All the precious stones known had been made use of in the ornamentation of the altar-piece. Thus the golden sun was represented by a large cluster of pure diamonds, the moon by topaz, &c. The windows were made of crystal, ruby, amethyst, &c., covered with paintings to drown their too great brilliancy. The floor was of clearest crystal, below which were seen all the animals of the sea, made of onyx, and appearing to live and move in the water of the crystal. The towers of the temple were built of precious stones, inlaid with gold, and the roofs of all the buildings were of red gold, with blue ornaments. Each tower was surmounted by a cross of crystal, bearing an eagle of gold, with outspread wings, and seeming to fly, as the purity of the crystal rendered the cross invisible. The cupola of the main and central tower was an immense carbuncle, gleaming in darkest night far through the forest which surrounded the temple, and thus serving as a beacon-light to the templar

knights. In the very centre of the temple, and immediately under the cupola, was placed a miniature copy of the whole temple, luminous beyond description. In it was kept the holy St. Graal.

When Titurel died—for those kings nominally died, though it seems that they remained living in the temple—he was succeeded by his son, Frimutel, who had four children: Anfortas, Trevrezent, Herzeleide, and Repanse de Schoie. Anfortas, being the eldest, became the next king, but losing his claims to the high office from inordinate devotion to love, the throne became vacant, for Trevrezent turned hermit on account of the misfortunes of Anfortas. Repanse de la Schoie was a virgin, and was the only one held worthy, by reason of her purity, to be the bearer of the St. Graal, whereas Herzeleide had remained without a son from her first husband. The sad catastrophe which caused this vacancy in the throne of the St. Graal is narrated by Eschenbach as follows: "Poor Anfortas, at the age when his beard began to sprout, felt too strongly the violence of love's desire. For the holy St. Graal accounts it a penal offence, on the part of its chosen priests, to submit to the passion of love."

Impelled by this chivalrous passion, Anfortas travelled over the world seeking adventures and glory, forgetful of the holy Graal, and loosing the purity of heart required by its service. As a punishment heaven ordained that in a combat with a Pagan from the banks of the Tigris, he should be wounded in the loins by a poisonous spear. On his return to the holy temple, the knights of the St. Graal carried their wounded king before the holy gem, expecting it to manifest, as usual, its healing power. But the St. Graal only renewed the life of the poor king, who continued to suffer the most intense pain from his wound. All the endeavours of his attendants to draw out the poison were in vain; in vain did they try the remedies of doctors' books—the herbs and stones recommended in such cases; in vain did they send to the banks of the four rivers that flow from paradise in search of a cure; in vain did they apply the blood of the pelican, the heart of the Monicirus, and the carbuncle which grows out from under its horn; even the wonderful herb called trachonte did not heal the wound of Anfortas. At last, while the poor king was writhing in pain and his attendants were all kneeling before the St. Graal in prayer, the gem suddenly became illuminated, and the astonished knights read

in it these words: "Soon shall a knight arrive here. When he *asks the question*, the king shall be relieved from his pain."

"Die Schrift sprach: Habt ihr das vernommen,
Aus Warnung kann nur Schaden kommen,
Auch frag er in der ersten Nacht;
Hernach vergeht der Frage Macht.
Hört man zur rechten Zeit ihn fragen,
Soll er des Grales Krone tragen
Und sich der Kummer enden;
Die Hülfe will Gott senden.
Das mag Anfortas Heil verleihn;
Doch soll er nicht mehr König seyn."*

The knight thus preternaturally prophesied was Sir Parcival, son of Herzeleide by her second husband, and it is in Parcival's search after the St. Graal, and final success in gaining des Grales Krone and relieving the misery of his uncle Anfortas, which Eschenbach has chosen as the leading idea of his great epic. With consummate skill he keeps this point in the background until the very centre of the poem, and it is only by occasional phrases that the previous portion of the poem suggests what is coming.

The whole poem is divided into sixteen cantos, or books, the first two whereof are introductory, and the last one partly in the nature of an epilogue:

"Wo Zweifel nah dem Herzen wohnt,
Das wird der Seele schlimm gelohnt."†

With these suggestive words the poet opens his epic, proceeding to contrast faith and fidelity with doubt and unfaithfulness, as the colours of white and black are contrasted in the magpie. He then proceeds to tell the history of Gahmuret, Parcival's father, whom he introduces to us as at the court of Anjou, as a dissatisfied younger son, longing to plunge into the world of adventures, to gain, by the valour of his own arm, that position which his position at court debars him from. His mother in vain urges him to stay:

"Fils du Roi Gandein,
Willst du nicht länger bey mir seyn?"

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* The writing spake "Now mark it well,
In warnings only harm can dwell;
Nor let him in the first night fail,
For with it stops the question's spell.
If he but ask at the night hour,
The Graal's crown shall be in his power;
And all this woe shall end,
Such help God deigns to send.
Anfortas you restored shall see,
But king he nevermore may be."

† Where near the heart black doubt doth dwell
The soul must suffer pains of hell.

Sprach das weibliche Weib.
" O weh, es trug dich doch mein Leib!
Du bist auch König Gandeins Kind
Ist God, dass er mir hülfe, blind?
Oder liess sein Ohr ertauben,
Dass er mir nicht will glauben?
Soll ich noch neuen Kummer haben?
Meines Herzens Lust hab ich begraben,
Und die Süsse meiner Augen:
Will er noch mehr mir rauben?"*

Gahmuret engages first in the service of the powerful Calif of Bagdad, and after various travels through Persia and Arabia arrives at the court of a Moorish queen, Belakane, in Africa, who is besieged in her capital by two armies, the one, a negro army, and the other, an army from Scotland. The queen rejoices at Gahmuret's arrival, whom she hopes to gain in behalf of her cause, fearing only that her black face may be an obstacle. But the hero, sitting down at her side on the sofa, and listening to her sad story, falls an easy victim. During her recital:

" Viel Seufzer sie entchickte,
Zwischen Thränen manchmal blickte
Sie beschämt und scheu hinan,
Zu Gahmureten, da began
Ihr Aug dem Herzen zu vertraun,
Der Degen wäre schön zu schaun,
Sie war auch eine Kennerin
Lichter Farbe: früherhin
Sah sie schon viel lichte Heiden.
Da erwuchs zwischen beiden
Getreue Minne mehr und mehr:
Sie blickte hin, er blickte her."†

The result of which coquetries on the part of her sable majesty is, that Gahmuret defeats both the Christian and the Pagan armies, and, returning victoriously, is immediately led by the impatient queen to her bedchamber. Thus Gahmuret becomes king of the two provinces, Zassamark and Assagon; but soon getting tired of life in a country which

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* "Fils du Roi Gandein,"
Spoke the womanly queen;
"Wilt thou no longer stay with me?
Alas, my womb bore thee!
And thou art good King Gandein's son.
Has God then blind to help me, grown?
Or deaf his ear to grief,
That he will not believe?
Am I to bear still His displeasure?
I have buried my heart's treasure
And the sweetness of my eyes;
Asks he greater sacrifice?"

† Many sighs she emitted;
Between tears often flitted
A blushing look wistful sidewise
Towards Prince Gahmuret; soon her eyes
Unto her heart 'gan to confess
The knight's fine form and good address.
For she had judgment quick and keen
Of light colour; she had seen
Pale-faced heathens oft before.
Thus began more and more
Faithful love in them to stir;
She looked at him; he looked at her.

has no institutions of knight-errantry he, like his prototype, Aeneas, runs away from the queen, confiding to her, in a letter, his pedigree and station in the Christian world. The disconsolate queen, soon after her false husband's treachery, gives birth to a son, who is rather a curious specimen of amalgamation, being not of a mulatto colour, but black and white in alternate spots like a magpie. This magpie-spotted son of Gahmuret, whom his mother names Feirefis, is destined to play an important part in the life of his brother Parcival, growing up, as he does, to become a valiant soldier, whose fame resounds at times through the poem, which now takes leave of the Moorish queen to follow the fortunes of Gahmuret. Escaping many storms at sea this knight lands safely at Sevilla, where the beautiful widow, Queen Herzeleide, heir to the Graal, had arranged a magnificent tournament, promising the victor her hand and the two kingdoms of Norgal and Waleis, which she had inherited from her first husband. Gahmuret's splendid appearance attracts universal attention amongst the knights assembled at Sevilla and wins the love of the queen. The immense number of knights—amongst whom we meet the British king Uther-Pandragon, father of Arthur; King Lot, of Norway, with his son Gawain, &c.—have divided into two armies, the one camping in the town and the other outside. Thanks to Gahmuret's valour those inside the city gain the victory, and Gahmuret is proclaimed the victor, entitled as such to the hand of the queen. But, whereas, Herzeleide is impatient to conclude the marriage, Gahmuret, thinking of his deserted black wife, feels remorse; but finally cedes to the entreaties of the love-sick queen, conditioning that he may enjoy every month a tournament. Eighteen happy months pass away, when Gahmuret, learning again of some danger threatening his friend the Calif of Bagdad,* once more departs on an adventurous expedition, in which this time he loses his life. The news of his death reaches the poor queen a few weeks before she gives birth to a child, whom she names Parcival, and with whose birth the poet now announces that his story really begins.

Herzeleide having lost her husband through his inordinate passion for knightly adventures, resolves to retire with her son to the wilderness, and to bring him up in utter ignorance

* Geographical conditions, or conditions of space, never trouble either the heroes or their poets.

of his worldly position. She abandons her kingdoms, and only takes along a few trustworthy servants, whom she strictly enjoins never to speak of knightly matters to her son. Parcival thus grows up unconscious of any other warlike amusement than the shooting of birds, and manifesting always that simple goodheartedness which accompanies him throughout the poem. For:

Wenn er jedoch das Vöglein schoss,
Dem erst Gesang so hold entfloss,
So weint er laut und strafte gar
Mit Raufen sein unschuldig Haar.
Sein Leib war klar und helle:
Auf dem Plan an der Quelle
Wusch er sich alle morgen;
Nie meint er sich geborgen
Bis ob ihm war der Vöglein Sang
Die Süsse ihm das Herz durchdrang:
Das dehnt ihm seine Brüstlein aus.
Mit Weinen lief er in das Haus.
Die Königin sprach: "Wer that dir's an?
Du warst ja draussen auf dem Plan."
Da wusste er ihr kein Wort zu sagen.
So geht es Kindern noch in unsern Tagen.*

Herzeleide is jealous of the birds, and orders them to be killed; but, Parcival interceding, she remembers that they are creatures of God, and to Parcival's question: Who God is? she replies, that God is lighter than the day, and implores her son to always remain faithful to him, and never to listen to doubt or black unfaithfulness, the outgrowth of hell.

One day the boy has gone out alone in the forest, when there pass four brilliant knights. Parcival, at the sight of their glittering armour, lighter than day, holds them to be gods, and kneeling down, entreats their good-will. They laugh at him, but one of them remains and answers the boy that he is not God, but merely a knight. Parcival then asks to know everything concerning knight-errantry, to which the

* But when he saw the birdlet's blood—
From whom so sweetly song had flowed,—
Loud did he weep, and wildly tear,
For punishment, his innocent hair.
His body was clear and shone.—
On the plain, at dawn
He washed himself in the spring.
And not till the birds did sing
Did he feel safe to depart;
That sweetness melted all his heart;
It made his little breast swell wild;
Weeping ran home again the child.
The Queen spake: "Who has hurt thee then?
Wer't thou not playing on the plain?"
And he had not a word to say.
It happens yet to children every day.

knight, marvelling at such want of understanding, combined with a beauty of body indicating noble birth, gives him full explanation, and tells him that to become a knight he must go to the court of King Arthur. The boy, returning home, implores his distracted mother to send him to King Arthur's court. Unable to resist his prayers, she hits upon a plan which she hopes will soon bring him home again. She gives him the poorest horse in her possession, the worst outfit, and dresses him in a clown's suit. Moreover, she enjoins him to observe the following rules in his travels: Always to be courteous and polite, to follow the counsels of old men, to accept a woman's ring and good-will, whenever a chance presents itself—nay, even to snatch a kiss, &c. Having then kissed him, she sends him heartbroken away, and dies immediately after he disappears from her sight. Parcival, full of gladness and love of adventure, meets on his travels the encampment of the Duke Orilus, and stepping into one of the tents, finds the Duke's wife sleeping:

"Entschlafen war die Fürstin werth.
Sie trug der Minne schärfstes Schwert:
Einen Mund durchleuchtig roth,
Verliebten Ritter's Herzennoth.
Während die Schöne schlief,
Der Mund ihr von einander lief . . .
Schneeweiss wie von Elfenbein
Zusammen dicht gefügt und klein,
So standen ihr die lichten Zähne . . .
Gott selber schuf den süssen Leib
Es trug das minnigliche Weib
Langen Arm und blanke Hand.*

Which hand holds a ring; whereupon Parcival, faithfully carrying out his mother's injunctions, proceeds, without preliminaries, to embrace and kiss the lady, who awakening, and finding herself in the arms of a strange man, asks for an explanation. But Parcival, in reply, only takes from her her rings and necklace, and leaves her to face the fury of her husband, who, upon learning from his wife Parcival's conduct,

* The lady fair lay fast asleep.
Love's sharpest weapon she did keep:
A mouth transparently red;
To lovesick knight full sore heart's dread.
Whilst slept the fairest wonder,
Her sweet mouth ran asunder, ...
Snow-white as of ivory
Closely together joined and wee—
Thus stood her lumnious teeth;
God's self did fashion her sweet body.
The lady, rich of love's sweet charms,
Had white, soft hands, and fair, long arms.

accuses her of adultery, and hurries off in pursuit of our hero. Parcival, in the mean while, slowly proceeds on his journey, giving greeting to all whom he meets, in obedience to the instructions of his mother. On the wayside he meets a lady, weeping over the body of a slain knight. She asks his name. Our hero replies that he has no name, his mother having always called him "bon fils, cher fils, beau fils." Whereupon the lady, who is a cousin of his, recognizes him, and tells him that his name is Parcival. She moreover advises him of his station in the world, telling him that the knight Lähelein has taken possession of the two kingdoms, Norgal and Waleis, properly belonging to Parcival. Parcival swears to kill Lähelein; for the present, however, he has no other wish than to arrive at King Arthur's court. But his cousin, Sigune, fearing for his life, puts him on the wrong path and directs him into Brittany. Parcival arrives at a fisherman's house. In return for the gift of the necklace, the man takes Parcival to Nantes, the capital of King Arthur. Here the dress and equipment of Parcival excite universal amusement, whilst the wonderful beauty of his body impresses all with admiration. Kunneware, a sister of Duke Orilus, who was not to laugh until the flower of chivalry and great price of the Round Table should meet her eyes, laughs the moment she sees Parcival, and her brother, Antanor, who had been dumb in the same manner, suddenly speaks. Kay, jealous at these manifestations, punishes both the maid and youth for showing such favours to Parcival, which maltreatment our hero vows to avenge. In the mean while, Arthur accedes to Parcival's entreaties, and allows him to engage in combat with the Red Knight Ither, to win armour and knighthood from him. Parcival kills the Red Knight, throws off his own clown's dress, and assumes the red armour and red horse of Ither. Leaving King Arthur he soon arrives at the castle of a noble old knight, Gurneman, with whom he stays two weeks, learning from his host all the customs, courtesies, and accomplishments of knights, and then departs. Parcival thus arrives in a new kingdom, the capital whereof is besieged by a hostile army. He offers his services to the queen, Kondwiramur, who, as a reward for his successful termination of the siege, marries him. But, like his father, he soon leaves his wife, alleging as a cause a desire to learn news of his mother.

Hitherto, the poem has proceeded with epic calmness to unfold the boy Parcival's development into the accomplished, tried, and faithful knight, whom a vague yearning

for something higher than even love, has now torn from the arms of a loving and beloved wife.

The manner in which Eschenbach has elaborated all these adventures, deserves the highest praise. Every character is drawn true to nature, and particularly the characters of the women are unfolded with the consummate skill of an artist and close observer of human nature. Indeed, the lyric element is rendered wonderfully effective, as, for instance, in the canto which describes the loves of Kondwiramur and Parcival. This depth of sentiment, alternately changing with the splendour of epic description, produces a great impression, so that even, without the significant story of the St. Graal, the mere description of the adventures of Parcival would indicate the complete artist. Every part of the poem interests for its own sake, and only suggests something beyond.

It is not until after Parcival's departure from his new home that we step into this beyond; at first, however—and therein the consummate skill of the artist is again manifested—seeing in the beyond nothing more than Parcival does; namely, the mere present. Eschenbach describes, as if it were an adventure like all the others, how Parcival arrives late at night at a sea, and there meets fishermen, the seeming chief of whom, a sad, pale man (Anfortas in fact, although we are not yet told so), to whom Parcival addresses his request for a night's lodging, replies, that he knows only of *one* house, a castle, which he points out far in the forest. Parcival reaches this castle in safety. It is an immense building, wonderfully made. Numbers of knights receive him with attention, and lead him to his rooms. After a while he is told that the king awaits him. He is brought into a large room, lit up by hundreds of chandeliers, and the walls surrounded by a hundred canopies, on each of which sit four knights. Large piles of aloe-wood are burning in three immense marble grates. Parcival's host, painfully wounded, lies on a couch and calls our young knight to his side. Suddenly the door opens, and a servant enters with a *bloody lance*, which he carries all around the room, amidst universal sobbing of the knights, and then retires. Supper is now brought in, and the poet enthusiastically describes all the ladies as they come in, relating at length the magnificence of their dresses. The last of these ladies is Repanse de Schoie, alone deemed worthy, by reason of her purity, to bear the St. Graal. She places the holy gem before the host. Parcival looks on with strange apprehensiveness, but recollecting the

advice of old Gurnemanu, not to speak too much, he remains mute. All the food and drink of the supper come from the Graal. Parcival notices it and marvels, but again unhappily keeps silence. The host, alarmed at the silence of his guest, causes his sword to be brought in, a magnificent jewel, and handing it to Parcival, says: "Take this sword which often helped me in distress, when I had not yet received this heavy wound." But even this direct reference to his wound does not open Parcival's lips, and gloomy silence settles upon the host and his company. Parcival is conducted to bed; has bad dreams; when he wakes up he finds himself alone in an empty room. Every trace of life is vanished as if by enchantment. He dresses himself, finds his horse tied before the door, and as he rides off across the drawbridge—puzzled at this strange disappearance of all the knights—the watchman of the bridge cries after him: "O, sir, had you but loosened your tongue and asked the host! But now the high prize is taken from you!" Parcival insists on an explanation of these strange words, but in vain. Riding forth he again meets his cousin, Sigune. She, hearing from him his nightly adventures, tells him that he must have been in the famous Graal temple at Monsalvage, praises him as the happiest of men to have been esteemed worthy such high favour, but deplores his wretched fate when she hears that he did not ask the question which was to relieve Anfortas from his tortures, and place him, Parcival, on the throne of the Graal. He leaves his cousin in sadness, and on his way meets the Duke Orilus, whom he conquers in battle and sends to King Arthur. The king, thus hearing of his Red Knight, causes his whole court to break up in pursuit of the valiant Parcival, in order to admit him as one of the Round Table.

With wonderful fervour Eschenbach now describes the growing sadness of Parcival, who is beginning to feel the greatness of his error in not asking the question in the temple of the Graal. Waking up on the morning he finds the fields all covered with snow. A falcon from King Arthur's camp approaches Parcival's resting place, and in pursuit of some wild ducks wounds one of them, and three drops of blood fall upon the snow at Parcival's feet. The red and white colours remind our knight of the beautiful Kondwiramur, and he falls into profound thoughtfulness. Three knights, from King Arthur's followers, amongst them Kay and Gawain, find him thus wrapt in melancholy meditation. The first two he disarms, and returns to his thought-

fulness. But Gawain spreads a handkerchief over the drops of blood, and thus dispels the charm which held Parcival spellbound. Parcival now is led by Gawain to Arthur, and is received by the whole assembly with great joy. But when about to be admitted to the Round Table, there appears in the festive assembly the gloomy Kondrie la Sorcière, the awful messenger of the St. Graal, whose hair is like bristles, while tusks grow out of the mouth like out of that of a boar; who has the nose of a dog, and two eyebrows hanging down her face like pigtails. This woful messenger bids Arthur pause before defaming the Round Table by admitting to it a knight who has been allowed to penetrate into the temple of the Graal, and yet was stupid enough not to ask its meaning. She accuses Parcival, who she says is far more monstrous in heart than herself in body, so monstrous that he could look upon the sad fisherman bereft of joy and comfort, and yet not relieve him by asking the question. "He showed to you all the weight of his woe, and his sufferings did not move your heart! O may your tongue rot as your heart is rotten! And as He who gives and takes has predestined you for hell, so may you on earth already suffer the hate of all the gods. . . . Was ever seen so deceitful an appearance as the body of this man?"

"Gab euch nicht der Wirth das Schwert,
Des ihr niemals wurdet werth?
Doch statt zu fragen schwiegt ihr still,
Ihr seid des Höellenhirten Spiel.
Ehrloser Mann, Herr Parcival!
Trug man euch nicht vor den Graal,
Schneidendes Silber, blutgen Speer!
Ihr Freudenziel, des Leids Gewähr!"*

The grim sorceress also explains to the whole assembly the birth and position of Parcival, and advises him of his magpie-spotted brother Feirefis. She then calls on the other knights to achieve a wonderful adventure, which is to liberate the four queens held prisoners by the great sorcerer Klingsor, in the Châtel Merveil.

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* "I'll gladly swear upon your head,
If any one deems such oath meet
Never was witnessed more deceit
In man so beautiful of make—
O cheating bail, O tooth of snake!
Gave not the host his sword to you,
Of which you never worthy grew?
You silent sat, a woeful shame!
You are hell's keeper's surest game.
Infamous man, Sir Parcival,
Were you not shown the holy Graal,—
Sharp-cutting silver, bloody spear,—
Their pledge of joy, their sign so drear?"

Parcival, weighed down bythe now clearly seen enormity of his conduct in the Graal temple, bids farewell to the knights and King Arthur. He does not wish to become one of the Round Table, lest his sin should fall on the others. His whole salvation now lies only in seeing again the St. Graal :

"Mir kann kein Heil mehr geschehn,
Bis ich den Graal hab ersehn,
Es währe kurz; oder lang,
Mich jagt dahin der innre Drang;
Auch wendet nichts mir den Entschluss,
So lang ich bin und leben muss."*

The whole assembly breaks up. Gawain and others proceed towards the Châtel Merveil, while Parcival rides forth alone, filled with sadness and despair, cursing God, and wishing his life at an end.

The poet now takes leave of Parcival to follow the adventure of Gawain, who, in the following canto, becomes the chosen knight of one of Eschenbach's most glorious creations, a young girl—Obilot—fully a child yet in age, and yet acting with all the coquetry of full-grown womanhood, in whose service Gawain does marvellous deeds. Obilot is a princess, and in the army opposed to her we get a passing glimpse of a valiant knight, clad all in red (Parcival), whom the poet introduces thus with consummate effect from time to time, as hurrying along in his wild search for the mystic Graal. Taking leave of Obilot, Gawain arrives at the court of Askalon and falls suddenly and violently in love with the king's sister, Antikonia. She is about to accede to his passionate pleadings when they are interrupted, and in their flight find refuge in an old tower. Here they undergo a regular seige, and while Gawain uses a large chess-board as a shield, Antikonia uses the chess figures as hostile missiles to repel the assailants. After a tedious fight, an armistice is made, and it appears that the King of Askalon has recently been overthrown in combat by a red knight (Parcival), and given his word to go in search of the St. Graal. He offers Gawain free departure, if Gawain will undertake this mission; and our knight, gladly accepting the compromise, departs in search of the holy Graal.

* No salvation more for me,
Till the Graal again I see,
Be't soon or late, I must be gone,
An inner impulse drives me on.
Nor can ought my resolve impair
Whilst I exist and life must bear.

This leads the poet naturally back to Parcival, who is still pursuing his weary and hopeless journey. He meets Sigune again, who advises him to follow Kondrie, the sorceress, who has just been and seen her. Parcival follows the path pointed out, and meets a knight, who refuses to let him go further, alleging that the forest is that of the St. Graal Temple, which no strangers are allowed to enter. But Parcival presses onward and overcomes the knight, who takes to flight, leaving his horse to Parcival as a prize. Parcival pursues his journey, and after a long time we meet him again in a forest. It is Good Friday, and Parcival encounters an old, gray-headed knight, walking barefeet with his wife and daughters doing penance. In conversation with them, Parcival for the first time feels himself drawn back again to God, and begins to have some hope of redemption from his state of wretchedness. In this hope he allows his horse to chose its own path, and the horse leads him to the fountain salvage, where he meets the hermit Trevrezent, brother of Anfortas, and uncle of Parcival. And now for the first time the poet reveals to us the mystery and story of the St. Graal. "Whoever had asked me to tell it before, had done so in vain, since Kiot commanded me to keep it secret, until in the course of events it became necessary to reveal it." Parcival, in conversation with his host, remembers that he has been in the same hut before his appearance at the court of Arthur. He asks his host how many years have passed since then, and is told, five years, six months, and three days. "Five and a half years," says Parcival, "have I then nourished in my heart hatred and anger against God, and sought nothing but forgetfulness. . . . And he, who is a help to all, never helped me." The poor hermit endeavours to pacify Parcival's heart, and, learning the cause of Parcival's grief, commends him for regretting his wife, but calls him foolish for persevering in his search for the Graal, since the St. Graal comes not to those who seek it, but only to those who are chosen by heaven for its service. This leads him further to tell Parcival the whole origin, source, and blessings of the St. Graal, as we have already described it. When speaking of the sufferings of Anfortas, his brother, and how some years ago, a young knight, the chosen king of the Graal, had been admitted into the temple, but had lost the great prize through his foolish silence—Parcival discovers himself, and Trevrezent owns him as

his nephew. He endeavours to inspire Parcival with hope, and when he takes leave of him it is in these words:

" Deine Sünden lass mir hier:
Gottes Huld erfleh ich dir.
Leiste was ich dir gesagt:
Halte fest dran unverzagt."*

While Parcival pursues his search, Gawain, now also in pursuit of the holy Graal, arrives at the Châtel Merveil, and by successfully achieving the famous adventurer thereof, as well known and told in all books of chivalry, relieves from the enchantment of Klingsor, or Merlin, the four queens mentioned by Kondrie, one of whom, Arnive, is the widow of Uther Pandragon and mother of King Arthur; the other Sangive, widow of King Lot of Norway, and sister of Arthur and mother of Gawain; the third and fourth Itonje and Kondrie, daughters of King Lot and sisters of Gawain.

In the course of this marvellous adventure Gawain has occasion to send a messenger to King Arthur, requiring the presence of himself and his whole court, to witness his combat with the great and mighty knight Gramoflanz. Arthur, therefore, meets his enchanted, lost relations, and soon after his arrival, Gawain, fully prepared for the combat, prepares to meet his enemy. He meets a knight riding a horse of the knights of the Graal, and taking him to be his opponent, engages in combat with him, but soon succumbs, and in falling discovers the stranger knight to be Parcival. Unable now to meet Gramoflanz, Gawain postpones the combat until the morrow, but early in the morning Parcival comes in advance of Gawain and overthrows Gramoflanz as he before overthrew Gawain. Thus the combat between the two original opponents is again postponed until the morrow. But in the mean while Gramoflanz discovers that the one of the four queens, whom he is in love with, is the sister of Gawain, and this discovery leads to a general reconciliation and marriage. During the festivities Parcival—not in humour to share such joys,—rides secretly away. As he rides he meets a pagan knight with many armies travelling the same road. To the great astonishment of the pagan, Parcival does not clear the road, and a fight is the natural result. After a tremendous struggle Parcival strikes down the pagan, but the

* " All your sins leave here with me,
God's grace I'll implore for thee!
Follow close the counsel given,
And repose your trust in heaven!"

stroke has broken Parcival's sword, and he stands weaponless. The pagan generously refuses to kill his opponent, and asks his name, at the same time discovering his own face. Whereupon Parcival recognizes the stranger to be his brother by the black and white spots of his skin; and a tender embrace follows the recognition. Both men return to King Arthur's encampment, where Feirefis causes universal astonishment by his wealth, appearance, and strength. So delighted is King Arthur, that he orders an especial feast of the Round Table for the following day to admit the pagan—as, indeed, throughout the whole of this poem, pagan, christians, and mohammedans are sworn friends or enemies, as the case may be—religious prejudices being unknown to the author. During the Round Table festival the grim Kondrie la Sorcière enters again, but this time with a message of joy. She announces to Parcival that the St. Graal has pronounced him worthy to become its king. She also tells him that his wife Kondwiramur has, during his absence, given birth to twins, now more than four years old, two boys, the one of whom Lohengrin is destined to become Parcival's successor as king of the Graal, whilst the other, Kardeiss, has been chosen to rule his wordly kingdoms, Norgal and Waleis.

This terminates the happy festival, King Arthur and his followers leaving for home, and Parcival, accompanied by his brother (who, by special permission, is allowed to go with him), for Monsalvage, the temple of the St. Graal.

In the last canto of the poem the poet therefore transports us into that sacred temple, where Anfortas, suffering excruciating tortures, curses his knights, that they will not permit him to die, but keep him alive by the power of the Graal. They, however, relying upon the Graal's prophecy, await again the coming of Parcival to deliver his uncle. Anfortas tries to kill himself by keeping his eyes shut before the holy gem, but its brightness is too intense, and he continues to live and suffer. These sufferings increase in intensity as the planets Jupiter and Mars are about returning, and the whole temple is filled with sobs and cries of anguish and sympathy, when a tumult outside announces the arrival of Parcival. Loud cries arise:

"Ein End hat all unser Leid:
Mit des Grales Wappen eingetroffen.
Ist auf den wir täglich hoffen."*

* "Ended now is all our woe,
With the Graal's arms has drawn nigh,
He, on whom we all rely."

Parcival and the astonished Feirefis enter the sacred building, and are brought to the unhappy Anfortas, who implores Parcival to keep but hidden from his sight the Graal seven nights and eight days, so that he may die and be rid of his pain. But Parcival, weeping, calls for the Graal, and throwing himself upon the ground, calls three times upon the Holy Trinity to relieve the "sad man." Then arising, he turns to Anfortas and asks: "Uncle, what aileth thee? And immediately He who raised Lazarus from the dead caused Anfortas to arise," in full health and beauty of body—a beauty so exceeding as utterly to overshadow that of all other knights even that of the beautiful Parcival.

While Parcival is being pronounced King of the Graal, news arrives that his wife Kondwiramur is coming with her two sons. Parcival hastens to meet her, and on the way stops at his uncle's (the hermit, Trevrezent), who praises God for having turned everything to a good end:

"Gottes Kraft ist unermessen!
Wer hat in seinem Rath gesessen?
Wer weiss ein Ende seiner Macht?
Zu Ende wird es nie gedacht,
Von allen Himmelschören dort,
Gott ist Mensch und seines Vaters Wort.
Gott is Vater und Sohn zugleich,
Sein Geist ist aller Hülfe reich."*

Thus, after five years' separation, Parcival meets again his wife, richer by the birth of two brave boys, the one of whom, Kardeiss, is crowned king of the worldly possessions of Parcival, whilst Lohengrin is taken with his mother to Monsalvage, where they meet Feirefis, whom Lohengrin refuses to kiss on account of his color, to the great amusement of the pagan. And now, when they are all together in the great room of the castle, the doors open and the Graal is brought in, carried by the same young queen, and filling the table miraculously with food and drink, to the intense admiration of Feirefis, who, being a pagan, does not see the Graal, and cannot, therefore, understand where all the good things come from. He does not see the Graal, but what he does see is its bearer, the beautiful Repanse de Schoie, and so

* The power of God is without measure!
Has ever man seen heaven's treasure?
Can anything His power transcend?
No thought may ever think its end.
God is man and his father's word,
God his father both and son,
His Spirit our salvation won.

intense is the passion he conceives for her, that the black spots of his skin look as pale as the white ones. Anfortas, who is brother to Repanse, sees the suffering of Feirefis, and guessing its cause, tells him to apply to Parcival. Feirefis swears, by Jupiter, that he is willing to break innumerable lances for the beautiful maiden's love; and when the knights present tell him that fighting will not win her, but only baptism, he replies, they may baptize him as much as they please, and that he is willing to renounce Jupiter, or any other god, providing his new god will bring to his arms the beautiful queen of the Graal. Baptized, therefore, in the name of the Holy Trinity, Feirefis can also see the St. Graal; and suddenly there appears upon the gem an inscription urging the knights, that, hereafter, if God should command any of the templar knights to go to the assistance of a people, they shall prohibit all strangers from asking their name and race, and shall immediately leave a people amongst whom such a question be addressed to them. For:

"Seit der gute Anfertas
So lang in bittern Schmerzen sass,
Weil die Frage nicht geschah so lange,
Ist ihnen jetzt for Fragen bange,
An des Graales Dienstgesellen
Darf man keine Frage stellen." *

Feirfis, thereupon, departs with his wife, who in "India" gives birth to a son, "who was called John, or the Priest John, and who left his name to the kings of the Graal until our times." It will be recollected that tradition, at Eschenbach's time, had already placed the Graal away from Spain into the centre of Asia, where a body of Christians (Nestorians) existed under the priestship of a certain John, whom Eschenbach thus connects with the race of Titurel through Feirefis.

Thus ends this strange and wonderful poem; in the last verses appending, however, the well known adventure of Lohengrin, the Knight of the Swans, with some of those personal and subjective remarks wherewith Eschenbach, at times, disfigures his otherwise thoroughly objective epic. The reader will now be able to judge, from the outlines of the mere story of the poem, with what skill of an artist Eschenbach has treated the three sagas of "Parcival," of "King

* Since Anfortas, on couch reclined,
So long in bitter anguish pined,
Because the question was not pressed:
Now do they fear to be addressed;
And made this rule: no question shall
Be asked of Knights of the St. Graal.

Arthur's Round Table," and of the "St. Graal." From the few occasional extracts of Simrock's version, the reader can also obtain partially a conception of the skill employed by Eschenback in the arrangement of metre and sounds. But of the splendour of general elaboration, the exquisite characteristics of men and women, and the true epic fidelity to nature exhibited by the poet in this work, we can furnish no conception by mere description or quotation. Never was a more glowing account written of that brilliant period of knight-errantry, and never held together in stricter unity and closer subjection to a great central object.

Opening with a few religious words, the poet plunges us immediately into the midst of knightly achievements, and it is only gradually that there arises out of this brilliant turmoil the solemn and significant mystery of the St. Graal. This contrast of the religious and worldly elements, which, in "Parcival," has moreover this advantage, enjoyed by no other illustration of it, that the religious element is not an abstraction, but a reality, is made to be wonderfully effective. The child-like innocence of Parcival, which prevents him from asking for the solution of the mystery he has been permitted to see, gives occasion to admirably contrived contrasts; and the grim, red figure of Parcival, during the time of his doubt and hostility to God, affords equal contrast to the brilliant adventures of Gawain in the marvellous castle, during the latter part of the poem. The only drawbacks to completeness are, as we have said, a deficiency of sensuous rhyme and word-beauty, and an occasional bringing in of subjective remarks, which have nothing to do with the story. These defects, however, may well be pardoned in a poet of the twelfth century, and one, moreover, who confesses to have had no book-learning and to be unable to write. They leave the poem valuable enough to deserve translation into our own language, wherein it will sound all the more familiar, as it deals chiefly with those heroes of the Round Table we are all familiar with. It will then, perhaps, be easier to judge whether Eschenbach has furnished an exhaustive representation of the St. Graal, as Goethe has indisputably furnished an exhaustive representation of the Faust-saga, or whether—Tennyson, having failed in singing the grandeur of his subject—the story of Sir Parcival lies still open for some future great poet.

ART. VIII.—1. *Inquiries into the Origin and Progress of the Science of Heraldry in England.* JAMES DALLAWAY, A. M. London.

2. *The Curiosities of Heraldry.* By MARK ANTHONY LOWE. London.

3. *Die Hauptstücke der Wappenwissenschaft.* Von DR. CHR. SAMUEL THEODOR BEND. Bonn.

4. *Nouveau Traité Historique et Archéologique de la vraie et parfaite Science des Armoiries.* Par M. LE MIS DE MAGNY. Paris.

WE are taught by the structure of language itself that, in the rudest and earliest ages, symbols, more or less adequate, were employed for the expression of pure ideas. Even Plato's guest declares "it is difficult to exhibit greater things without the use of patterns." Among profane nations, hieroglyphics were long the only means of recording history, and rude signs, carved in metal and stone, were the expression of the loftiest conceptions and events patent to the first historic scribes. And though in the light of maturer science these early means of communication were abandoned in the purposes of common intercourse, there were still retained fragments of the older method, and symbols alone continued to be employed for the expression of such general and comprehensive ideas as those of national character or purpose.

Man is naturally ambitious of preferment. Whether he mounts upward on the ladder of his virtues or of his crimes, is a matter of comparative indifference so that he ultimately occupies a place above the level of his fellows. The pirate chief is as proud of his command as the king is of his throne, The social exigencies of life demand that approbation should accompany what is good and noble only. And so we find that, while the achievements of any age or people never rise above its moral conceptions, the honour which it bestows are at once the stimulants of ambition and conservators of virtue.

Given then these two truths: that symbols thus express ideas, and that man is ever anxious to possess the marks of whatever excellence he inherits, or achieves, and we need only the peculiar circumstances attending the first employment of heraldic insignia in order that we may rationally account for their national introduction and use.

The tendency to estimate the value of science largely, by the simple element of its antiquity, has led many of the earliest writers on heraldry into notions exceedingly extravagant and absurd. In the "*Boke of St. Albans*," 1486, we find the following statement of the author's views of the origin of heraldry:

"How long Cote Armuris were begunne afore thyncarnation of oure Lord Jhesu Cryst. Jafet made first target, and therein he made a Ball in token of all the worlde. and afterward II m yere and XXIII afore thyncarnation of Chryste Cote Armure was made and figured at the sege of Troye where in gestis trojanorum it tellith that the first beginning of the lawe of armys was, the which was effygured and begunne before any lawe in the world bot the law of nature, and before the X commandments of God. And this law of armys was grounded uppon the IV. orderys of aungelis in hevyn encrouned with IV dyveris preciouse stonys of colouris and of vertuys diverys."

Nor is this an isolated instance of absurdity. Sir John Terne, a man of real erudition, was so far carried away by extravagant notions of the great antiquity of heraldic insignia, as seriously to deduce the use of "furs" in heraldry from the coverings made for Adam and Eve after their transgression. "This," says Lower, "is an unfortunate idea, for coats of arms are as certainly marks of honour as these were badges of disgrace."* "Cain also, after his fall, changed his armorials by ingrailing and indented lines, to show, as the preacher saith, 'there is a generation whose teeth are as swords, and their jaw teeth as knives, to devour the poor from the earth.' He was the first," it is added, "who desired to have his arms changed—so God set a mark upon him."†

Hardly more reliable is that hypothesis which founds the beginning of heraldic distinctions upon the banners borne by the tribes of Israel, in the book of Numbers. All evidence of a positive character being wanting, it is at least as probable that the inscriptions on their banners were the names of the leaders of the several tribes as that they were charged with symbolic figures or armorial bearings.

That the growth of the usages of heraldry was gradual, cannot be questioned, and there are many matters pertaining to periods earlier than the time of its reduction to a science, which are of exceeding interest in an inquiry into its origin. Out of the employment of national standards bearing insignia grew their appropriation by the sov-

* Curiosities of Heraldry, M. A. Lower. London, 1845.
† Bolton's Armories.

ereign—and it is more than probable that they were at first used by subjects merely as badges of loyalty. The rudest and most original standards were those produced by the ancient Germans, who erected on a spear the bloody head of the animal which they had just slain in the chase.* And it is of interest to remember, also, that "when the Saxon chiefs ratified the partition of the whole territory, and established the heptarchy to each principality, its own badge was assigned and borne upon its banners, and whenever any of the provincial kings became monarchs of the island they retained these gentilitial bearings as personal, not adopting any new device. This observation applies only to a period prior to 959, when Edgar added to the cross four marblets."† Whether the practices of knighthood grew out of the usages of this same nation may be a reasonable subject of enquiry, since Tacitus‡ speaks of a custom prevailing among the Germans resembling, in many essential elements, the forms and ideas nccessary in entering the order of knighthood.

The earliest usage bearing any analogy to the hereditary descent of armour is found among the Romans. By the *Jus Imaginum* any person attaining to the curule office thereby entailed upon his descendants the right of preserving the images of their ancestors. And these images, sometimes to the number of twenty or more, were borne publicly at funeral processions, as an evidence of the rank of the bereaved family.§ In these, and other similar usages of various nations, we behold the first signs of practices which in their extensive use and development, grew into a science; forming at the present day one of the most interesting subjects of antiquarian research.

Notwithstanding the fact that a few writers‖ claim some for Charlemagne, some for Spain, the honour of first digesting into an art, and subjecting to rules, the science of heraldry, the great mass of authorities point in another direction; and we are led by the circumstance of the common introduction of heraldic insignia into all the countries of Europe at the same period; by the similar laws regulating the use of armorial bearings in different nations; and by the warlike character of the insignia thus borne,

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* Berry's Cyc. Her. † Dallaway's Inq. into Origin of Her. 1793. P. 8.

‡ "In ipso concilio vel principum aliquis, vel pater, vel propinquus, scuto, frameaque juvenum ornant. Hasc apud illas toga, hic prionus juvental honos: ante hoc domus pars videntur; mox republicæ."—*De Moris Germ.*, *cap.* 13.

§ Tac. Ann. 111, 76. ‖ Sir George Mackenzie.

to look for their source in some common interest or enterprise, affecting all these nations alike, and reducing them in all essential respects, as far as this subject is concerned, to the control of common principles and laws. These conditions are more than satisfied in the Crusades.

Subjected to a real or supposed obligation of their religious faith, thousands from every country, nominally Christian, issued forth to redeem the Holy Sepulchre from the dominion of the infidel. The length and hazard of their journeys, the novelty of the scenes into which they were introduced, the adventures into which they were led by the *abandon* of their lives, heightened by the fact that every deed of prowess, however great, was contorted into yet larger shapes when elevated into the mysterious realm of religious fancy, through which their excited vision contemplated every object connected with the fanatical enterprise, naturally led to the adoption of some general principle, guided by which their valour might be recorded and acknowledged, and the history of their achievements borne home on the battle-shield itself.

The supposition is entertained by some that, in consequence of the impossibility of distinguishing individuals when clad in full armour, every knight adopted some device, according to his own fancy, by which he might be distinguished in battle. But when we remember that no such device was necessary in order to distinguish friend from foe, and that among the crusaders themselves no distinctions would probably be allowed, except such as associated themselves with their adventures or the purposes of their expedition, the suggestion becomes exceedingly improbable. On the other hand, we are informed that it was usual, before the introduction of hereditary heraldry, for knights to wear their shields blank until some achievement gave character to the insignia which they should place upon them.* It was, without doubt, a common custom to base heraldic distinction upon the trophies taken by a crusader, and which were borne afterwards on the shield, "in perpetual commemoration of the event."† The "Boke of St. Albans," before quoted, bases even the right of bearing arms upon distinction of this kind: "There is a gentylman of cote armure, and thoos be iii. Oon of the Kinges bage, another of a Lordshipp and the thyrd is of killing a Sarasyn." Whatever isolated in-

* Berry. Pref. † Dallaway.

stances there may have been, therefore, of the bearing of insignia approaching the distinctions of heraldry prior to this, there is hardly room for a reasonable doubt that we must look to the Holy Wars, as the source whence the custom of heraldic devices has issued. Nor are other evidences wanting to the same effect as those already adduced. The absence of all coats of arms on seals, used prior to this period;* the fact that the Bayeaux tapestry bears no sign of heraldic insignia of a date anterior to the Norman Conquest; † these, and other similar facts, joined with arguments before adduced, afford presumptive proof of the strongest character in support of our view, especially when we remember that the Normans were a people not behind the rest of the world in intelligence, and would probably have employed such marks had any existed.

As coat armour did not become hereditary in England until the reign of Henry III. and his successor,‡ but, before that period, families "gave now this, now that, sometimes their paternal, sometimes their maternal or adopted coats,"§ it is not strange that but few authenticated specimens of ancient coats are now to be found. The earliest yet discovered is mentioned by Dallaway ¶ "as the arms sculptured on the shield of the effigy of Geoffrey de Magnaville, in the Temple Church, who died in 1144." That which is next in order of antiquity is the shield at Mans of Geoffry Plantaganet, who married the daughter of Henry I., and who died in 1150.** Of seals, the first bearing armorial devices were employed in the time of Richard I. (1189)††. Rolls of arms, the next evidence in value to seals, do not appear till the time of Henry III. A document of this character, with some two hundred coats emblazoned or described, is still preserved in the College of Arms.‡‡ The College of Arms itself, to whose charge is committed the preservation of all heraldic records, and the regulation of all the concerns of English heraldry, was not established till the time of Edward III. In the reign of Richard III. it was granted a charter and extensive privileges. These were the palmy days of heraldry. Trials by combat took the place of courts of judicature, and the justice of every cause was submitted to the arbitrament of the lance. Here the champion vindicated his truthfulness by the strength of

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* Berry's Herald. Cyc. Pref.
‡ Lower's Cur. of Her., p. 27.
¶ P. 80.
†† Berry's Her. Cyc. Pref.
† Cyc. Brit. Her.
§ Waterhouse Dis., p. 77.
** Cyc. Brit. Her.
‡‡ Lower, p. 25.

his arm, and here the maiden, defrauded of her reputation, sought, through some relative or admirer, the restoration of her fame. Every strife, however important or trivial, whether the fate of a kingdom depended upon its issue, or the redress of some trifling or imaginary personal wrong, was submitted to this form of trial, the event of which God was supposed to control. When weightier causes were wanting, tournaments, or friendly jousts were provided, where, in the midst of magnificent and showy displays and ceremonies, knights might give and receive friendly blows, though often severe and sometimes fatal, and so have an opportunity of adding some new marks of distinction to the honourable escutcheons which they bore.

As with almost every other privilege, so with this; the right of bearing arms implied corresponding obligations. At times those holding tenure by knight's service were subjected to special taxes,* levied by the king, and they were always subject to a call from the lord under whom they held lands to attend him to the wars forty days in every year.† This latter service was, however, eminently compatible with the design of the institution itself, and in those warlike times gave abundant opportunity for the very kind of distinction which the knight desired. And his shield was made the tablet upon which his achievements and his discomfitures were written, for he might not conceal his defeats—the oath which he took upon an entrance to his degree compelling him to truthfulness in the latter as in the former instance.

While, however, at the first, arms were borne as the exclusive right of a few privileged classes, it was not long before the attention of the College of Heralds was called to the fact of the unlawful assumption of arms by persons of all grades of life; and it being found impossible to prevent the practice by the use of power, a way of escape was graciously devised, whereby the practice was legalized by the payment of a specific sum.‡ Thus began the absurdity of the bearing of military insignia by men of every class of society, and whose ordinary pursuits bore no manner of relation to the marks of distinction which they so earnestly sought and paid for. While, however, it was subject to this disadvantage, the enactment had the effect of popularizing a practice which otherwise, on account of its exclusiveness, was in danger of falling into disrepute and awakening the opposition

* Blackstone Com., vol. ii., p. 74. † Ib., vol. ii. pp. 62, 68. ‡ Dallaway.

of the mass of the people. It is not improbable that a similar practice on the Continent, rendering titles of nobility there a sort of common property, gave rise to the saying declared to be current there, viz.: "Formerly rogues were hung upon crosses, now crosses are hung upon rogues."

The nomenclature of heraldry is peculiar, pointing towards France for its origin, and making it exceedingly probable that the English are indebted, with other European nations, to Frederick Barbarossa, who limited its terms, and reduced heraldry to a science about 1152. It can hardly be doubted that the College of Arms owes much of the influence which it exercised in early days to the grammar of heraldry. By means of the latter a shield, so chequered with devices that pages would be occupied in an ordinary description of it, could be described with the most absolute accuracy in a few lines of terms, legible only to the initiated. It was thus rendered an easy matter to preserve the rolls of arms for the entire kingdom; and as all changes in the coats of families were carefully noted, these rolls came finally to be accepted in courts of justice as legal evidence of descent.

The shield, or escutcheon, has varied in shape with the caprice of the times. At one period it was perfectly circular, at another oval, at others, again, it has submitted to be tortured into whatever form the ingenuity of the wearer might suggest. The shapes most commonly borne and most in use at present are, for males, that which is called "a heater," from its resemblance to the shape of a sadiron on its flat side; for females, the diamond shape, or "lozenge," is commonly employed. A resemblance has also been traced between these forms and the shape of a spade and a spindle, and this, with reference to the descent of heraldic insignia from our first parents, has given rise to the quaint couplet:

> "When Adam delved and Eve span,
> Who was then the gentleman?"

The points of the shield, or escutcheon, through which we indicate on what part of the shield any particular charge (device) is to be borne, are: The dexter, middle, and sinister chiefs, the honour, or collar point, centre or fesse point, navel or nombril point, and the dexter, middle, and sinister base points. Their precise location may thus be indicated: If the numerals 1, 2, 3, be written in their natural order, we have the relative position of the three points first named above. Under the figure 2 write, successively, 4, 5, 6, so

that the 5 may be directly under the 4, and the 6 under the 5, and you have thus the relative position of the next three points named above. If now you write in their natural order again the figures 7, 8, 9, in a line across the bottom, corresponding to the first three figures across the top, you have indicated the three last points of the shield.

The ground of every coat of arms must be either metal, colour, or fur. The metals of heraldry are gold and silver. Colours are *gules* (red), *azure*, *vert* (light green), *purpure* (purple), *sable*, *tenne* (orange), and *murre*. The furs are *ermine*, *ermines*, *erminois*, *erminites*, *pean*, *vaire*, and *potent counter potent*. They are all said to be indicative of dignity. Ermine, the type of the first five above enumerated, is represented by three spots triangularly placed, and three hairs in black upon a white ground. Sir George Mackenzie informs us that "the first user of this fur in arms was Brutus, who, when he had by accident killed his father, travelled to Bretaigne, in France, where he fell asleep, and when he awoke found this little beast upon his shield, and from that time wore a *shield ermine*." Vaire is composed of shields of blue and white alternately placed. Potent counter potent, crutch opposite crutch, resembles the tops of crutches counter-paled.

Honourable ordinaries are denominated chief, bend, bend sinister, fesse, pale, cross, saltier, cheveron, and pile. The chief is the fifth part of the shield near the top. "In the primitive bearings, which were literally coats or mantles, the chief would be formed by turning the upper part of the garment back in the form of a collar. And thus a knight who wore a scarlet mantle, lined with white, would acquire as arms "*Gules, a chief argent.*" *Bend* is a stripe passing diagonally across the field; *fesse* is a horizontal stripe through the centre. The pale is like the fesse, except that it is perpendicular.

The whole animal kingdom was laid under contribution to furnish charges for the various fields of the escutcheon. Beasts, birds, and fishes were indiscriminately employed, and when the natural kingdom itself seemed exhausted, or lacking in appropriate devices, no hesitancy was felt in putting the imagination to the test and producing hybrid characters, and forms having no kind of counterpart in the natural world were freely employed. In fact, the caricatures of beasts themselves, when accurate imitation was attempted, did not bear a resemblance at all striking. It is related that a

herald painter, when taken to a menagerie, and upon a lion being pointed out to him, exclaimed: "That a lion! You cannot deceive me! I've been painting lions all my life, and I know that's no lion!" Portions of the human figure were sparingly employed. Uplifted arms are found sometimes as charges, and again as crests. The heads of kings are sometimes borne, though but seldom, while the head of a Moor or Saracen is of frequent occurrence.

Flowers of various kinds are often used, of which the *fleur de lis* is perhaps the most noted instance. The myth connected with its introduction is interesting, while it affords, at the same time, an instance of the credulity and superstition so prevalent in the middle ages. It was seriously believed that this emblem was sent from heaven by an angel, whose commission was addressed to Clovis, the first Christian king of France. Clovis, it is related, made a vow that if he proved victorious in a pending battle with the Allemans he would embrace Christianity. Having triumphed in the battle which was fought near Cologne, A. D. 496, he adopted the lily, which has been the national emblem ever since.*

The crest is of much later introduction than the armorial bearings of the field. It was used at first merely as a mark of distinction by the leaders in battle; afterwards it was employed by their followers as a badge, but in the course of time became generally attached to coat armour with other decorations, such as helmet, mantling, motto, and supporters, which, by certain rules and the introduction of coronets, &c., &c., mark the dignity of the bearer.†

From these elements, variously disposed, are formed the armorial bearings and individuals "honourable in their first achievement, and, with laudable ambition, continued by their descendants as a lasting memorial of heroic deeds, and other notable actions worthy of record, which, otherwise, might have long since been forgotten. Nor have these symbols of renown been uselessly displayed to rising generations, who, emulous of the glory of their ancestors, have added new laurels to the paternal wreath, and obtained grants of honourable "augmentations" as replendent as the first mark of honour which graced the shield of the warrior when the days of chivalry were in their zenith, and feats of manhood in joust and tournament succeeded the more sanguinary conflict of con-

* Haydn's Dict. of Dates. Fleur de lis. † Berry's Herald. Cyc. Pref.

tending valour in the field, or wounded honour in the rage of single combat.*

There are eleven different classes of arms.† Arms of dominion, or those borne by a sovereign, not of the family, but pertaining to the royal office. Arms of pretension are those borne by a sovereign who has no actual control of the country to which such arms belong, but who merely bears its arms to express his right. In this way the arms of France were long borne on the escutcheon of England. Arms of succession, or feudal arms, were borne by the possessers of certain estates. Arms of family or hereditary arms are those borne by every descendant of the first bearer, with proper differences to express his relation. Arms of assumption are those which may be rightly assumed without grant or descent. Sir Clement Clark, Baronet, 1661, is an instance, the description of whose coat is exactly like that of Louis d'Orleans, Duke of Longueville, whom Sir John Clarke took prisoner at the battle of Borny, August 6, 1513. Arms of alliance, expressing the juncture of two coats by marriage. Arms of adoption indicate that the arms borne by the wearer are not his by right of descent, but that the last member of a family has adopted him to bear his arms. In this case the stranger may relinquish his own name and arms altogether, or bear the two names and join the arms in the same escutcheon. Arms of concession, or augmentations of honour, are caused by additional charges granted by a sovereign as especial marks of honour. Some coats have, by means of this privilege, become so confused, that they resemble more a jumble of paintings of land and naval views, than military armour. The remaining three classes of arms are arms of patronage, arms of office, and arms of community.

The shield of the knight, however, as has been already intimated, was not only the record of his merit, but was also made the indicator of any disgrace to which he may have subjected himself. Accordingly, *abatements* were employed, by which dishonour, as well as prowess, might be stamped upon the escutcheon of the bearer, the degree of his delinquency characterizing the point in the shield which should be marked, and the nature of the mark itself. The inversion of the shield was deemed the heaviest penalty, and was the punishment of treason. The effect of this punishment was ob-

* Berry. † Sloan Evans' Brit. Her.

viously to destroy the entire coat, and to prevent its further descent.

It is useful, perhaps, as showing how the science degenerated, and how unreliable any coats at present existing may in themselves prove, to indicate the circumstances under which they began to be borne, to notice another class of arms, denominated "arms canting,"[o] and which bear in their charges some allusion to the name of the wearer. One Dobell is mentioned who bears a doe and three bells. A nobleman by the name of Colt has upon his escutcheon three colts. Miss Millington, in her "Treatise on Heraldry," mentions a family named Ramsey, which bears a ram emerging from the sea, while Juliana Berners cites the use of a *cross corded*, "borne by a roper, who afterwards became a *nobull* man." We suppose that to the same class would be attributed the arms borne by a retired tobacconist, who, ambitious of heraldic honour, procured a coat of arms for his carriage, and, desiring a motto, was induced to adopt that suggested by Curran, with a view to its double interpretation: *Quid Rides.*

While, doubtless, much of what we know of mediæval history would be entirely shut out from our knowledge, were it not for records preserved by individual families, and continually recalled to them by the armorial bearings which they have inherited, other facts and matters of record would be likewise unintelligible, were it not for the light which the science of heraldry throws upon them. Thus, the cry of the populace upon the assassination of the Duke of Orleans by the Duke of Burgundy, "Le bâton noneux est plane," would have no meaning to us whatever, were it not for the information accorded, that the former bore a *bâton engrailed* (a knotted stick), and the latter, a *plane;* and the cry thus interpreted, is legible, "the knotted stick is planed." We are likewise taught that achievements in war were not the only ground upon which the earlier distinctions among men were founded. Thus the escutcheon of Douglass bore, upon a golden shield, a crimson heart, surmounted by a golden crown, and its reference is to the fact that, when Robert Bruce died, with his vow unfulfilled, he would visit the Holy Land; Douglass, in conformity with a custom usual under such circumstances, bore his heart to the place which he could not visit himself, and ever afterwards wore these marks upon his

[o] Synopsis of Her., Elvin, 1866.

shield, as an evidence of his devotion to the cause of his sovereign.

That heraldry furnished a powerful incentive to valour, cannot for a moment be questioned. In an age eminently devoted to the pursuits of war, and when almost the only means of distinction lay in the prowess of the warrior on the field, when, in the universal ignorance which prevailed, men had no opportunity for acquiring eminence in letters, and when as yet the country was unprepared for the higher arts which flourish only in periods of greater national advancement, these marks of distinction served perpetually as stimulus to bravery, and as the promoters of loyalty. What, for instance, could have been more inspiring than the scene presented to us after the victory of the Bouvines.*

Among many others striving in the race for glory was Matthieu De Montmorency. He captured, in quick succession, twelve of the banners of the enemy, and all covered with gore, the blood streaming from many wounds on his body, he proceeded to present the banners to the king. Philip Augustus, dipping his fingers into the blood of his wounded follower, made the mark of a cross upon his shield, and said: "Oh valiant man, I will that henceforth you bear upon your shield, instead of a cross *argent*, a cross *gules* (red), and that you quarter twelve *alerions* (eagles) on your escutcheon, instead of one, as at present."

Thus were won many of the marks of distinction which have descended through long lines of succession, down even to the present day, and thus might the descendants of noble sires draw perpetually fresh inspiration to deeds of valour, from the insignia won on many a well-fought field, and which, while they pointed ever to an honourable and glorious past, served to rebuke any present action by which a noble heritage might be disgraced, and diminished honours transmitted to posterity.

The darkness of the age in which the scenes of heraldry were enacted, the known splendour of the surroundings attending such scenes, and the mystical character of the allusions floating on the popular current of tradition, as referring to these times, these, and other similar circumstances, have ever contributed to make the achievements of the knight and the heraldic tournament a favourite theme for the employment of the poet's pen. Hardly any of England's poets but

* Holinshed's Chron., p. 358.

has some reference, at least, to the usages of these shadowy periods of history. Who does not remember Spencer's Red Cross Knight:*

"Y clad in mightie armes and silver shield,
And on his breast a bloudie crosse he bore."

Chaucer, before him, had employed the usages of heraldry to enliven his rhymes, Shakespeare is full of allusions to the subject, and Scott, not only in his prose, but in his Marmion, also throws an additional lustre on the ancient use of arms. Sometimes the poet is absolutely accurate in the descriptions which he employs,† while at others fictitious personages and arms are introduced, but whether the former or the latter is the case, the mind of the reader is perpetually conscious of the fitting wedlock into which the arts of heraldry and poesy are joined. Even when the purpose of the poet is not to describe heraldic events it often is found that by the introduction of elements of this science he can heighten the effect of an illustration or more vividly describe a scene. Thus, when Dante pictures the usurers in his *Inferno* as being chained to the burning sand, their faces are so tortured by the heat that their features are no longer to be distinguished, and we know them apart by the arms which the poet attributes to them. Thus:

"But I perceived
That from the neck of each there hung a pouch
Which certain color had and certain blazon;
And thereupon it seems their eyes are feeding.
And as I, gazing round me, came among them,
Upon a yellow pouch I azure saw
That had the face and posture of a lion.
Proceeding then the current of my sight,
Another of them saw I, red as blood,
Display a goose more white than butter is.
And one, who with an azure sow and graved
Emblazoned had its little pouch of white,
Said unto me," &c.

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* Fairie Queen, b. 1, c. 2, st. 2.

† The following is an example of scrupulous accuracy in this respect:

"Upon his surcoat valiant *Neville* bore
A silver saltier upon martial red
A ladies sleeve high spirited *Hastings* wore,
Ferrer his tabard with rich valy spread
Well known in many a warlike match before;
A raven sate on *Corbet's* armed head;
And *Culpepper* in silver arms engrailed
And thereupon a bloody hand engrailed
The noble *Percie* in that dreadful day
With a bright crescent in his guidhomme came."—

Drayton's Baron's Wars, b. 1, st. 22, 23.

The "Lion of England," the "Red Cross Banner," the "White and Red Roses," the "Shamrock of Ireland," and "Scotia's Barbed Thistle," have again and again awakened lyric strains as enthusiastic and lofty as have been found befitting worthier themes, and thus the two arts have proven mutually beneficial; for, while the one has furnished the other themes for its song, the other, not unmindful of its obligation, has elevated its helper to the transfiguring atmosphere of its own life, and rendered it doubly immortal.

Nor is history free from its obligations to this science. In an age when but few written records were kept, the usages of heraldry served to mark, in the significant characters which they necessitated, the events by which all subsequent individual and national character and life were determined. Some sculptured stone in church or mansion, some ancient shield preserved as an heir- loom, or some device upon an ancient seal, reveals the history of deeds which otherwise must have been lost to the knowledge of man forever. To the genealogist the science is of inestimable value, as by means of it the history of families may be traced back to ages which have become almost fabulous. And so correct are its deductions, that they are admitted as evidence in courts of judicature; and Garter Bigland* asserts his knowledge of "three families who have acquired estates by virtue of preserving the arms and escutcheons of their ancestors."

The study of the mottoes attached to various coats of arms affords us an avenue to investigations of exceeding interest and pleasure. But while, like the supporters, they are considered less essential portions of the coat than the charges on the shield itself, they were adopted often at the mere caprice of the bearer, and are subject to continual alterations. There are, however, many instances on record of mottoes of an antiquity equal to that of the shield itself. Sometimes the motto is arbitrarily assumed, without any reason, save that it is illustrative of the bearer's taste; at others, it contains an allusion to the charges of the shield or to the family name; at others, it is the key to some interesting fragment of family or public history. As brevity is essential in a motto, and as it is also desirable that it should express the burden of its thought in some language of universal use, the great majority are in the Latin

* Herald. Anom.

tongue, this language being adapted to this purpose by its universality, as also by the facilities which it affords for laconic expression. Berna attributes the prevalence of Latin mottoes to the fact that they were principally furnished by the priests and other learned men. Still, they occur in all the languages of Europe, and a few are found in Greek characters.

Their use probably arose from the war-cry, known among the Latins as the *clamor militaris*, among the French as the *cri de guerre*, and, in the Scotch, as the slughorn or *slogan*. Already in the Scriptures we read of the Israelitish war-cry, "The sword of the Lord and of Gideon." Among the Irish the expression "à boo," was used as a sort of war whoop, while Englishmen were cheered by the cry of St. George, and France invoked the aid of St. Denis. These expressions, with various modifications, found their way either to the national standard, or to the escutcheons of the leaders of the several clans engaged in foreign or intestine war. Hence the "Montjoye and St. Denis" of France, the "Thanet à boo" of Desmond, and the "Butler à boo" of the Butlers.

The great body of mottoes is of a religious character. "Mon dieu et mon droit," upon the arms of England, and referred to Richard I., is an instance generally known of this kind. Many of these breathe the spirit of a simple and trustful Christian spirit, of which the following are examples: "Spes mea in Deo" (My hope is in God); "In Deo salutem" (In God salvation); "Sola virtus invicta" (Virtue alone is unconquerable); "Non mihi sed Christo" (Not to myself, but to Christ); "Sub cruce" (Under the cross); "Un roy, une foy, une loy" (One king, one faith, one law). Kelly bears the proverb, immortalized by Luther's hymn, "Eine feste bury ist unser Gott," "Turris fortis mihi Deus."

At times the religious motto receives additional point by the device on the shield itself, thus: Dyson bears a paschal lamb with a banner and cross, with the inscription beneath "Cruce dum spiro fido" (While I live I will hope in the cross). Rowan bears three crosses, issuing from as many crescents, with the motto "Cresco per crucem" (I will grow through the cross). Many mottoes, not of a religious character or strictly pious, are yet the vehicles of noble, moral sentiment. Sir Robert Throgmorton has for his motto "Virtus sola nobilitas" (Virtue is the only nobility); and many, trusting in vain to luck to elevate them to a position,

which by honest endeavour they might easily earn for themselves, may learn much from the motto of Lord Newhaven-"Virtuti fortuna comes" (Fortune is the companion of virtue); while a brave spirit cries out through the words, "Vulnerati, non victi" (Wounded, but not conquered). Many breathe the spirit of true loyalty and patriotism, as: "Vincit amor patriæ" (Love of country conquers); "Non sibi sed patriæ" (Not for himself but for his country); "Patria caria carior libertas" (My country is dear, but my liberty dearer). Sometimes the origin of a motto is involved in mystery, as that of the Duke of Bridgewater "Sic donec" (Thus until). A late barrister used "Non bos in lingua" (I have no bull upon my tongue)—which is a probable allusion to the Greek didrachm, a coin impressed with a bull, and may be meant to express the bearer's intention not to take a bribe.

An interesting class of mottoes is that in which some reference is borne to the device or the name of the wearer. This class is sometimes denominated *parlante*, and is often the means of exhibiting considerable ingenuity, and sometimes wit. The following are examples: the earls of Cholmondely, who bear helmets in their arms, have "Classis tutissima virtus" (Virtue is the safest helmet). The Egertons, who have a lion between three arrow-heads, have "Leoni, non sagittis fido" (I trust to the lion, not to the arrows). The crest of the Martins, of Dorsetshire, was an ape, and their motto, "He. who. looks. at. Martin's. ape, Martin's. ape. shall. look. at. him."

Of punning mottoes, the following are among the most noted: Adderly, of Staffordshire, has for a motto "*Addere Le*-gi Justitiam Decus" (Tis a support of the law to add justice to it). Fortescue has "*Forte Scri*-tum salus ducum" (A strong shield is safety to commanders). Hone, of Ireland, "*Honesta* Libertate," or "Hone-sta-Libertate" (With a just liberty, or, Hone support liberty). Vernon has a motto equally ambiguous: "Vernon semper viret," or, "Ver non semper viret" (Vernon always flourishes, or, Spring does not always flourish.

Often an inscription occurs on an escutcheon referring to some memorable event or honourable service performed to a sovereign or country. Thus the Duke Bulow *v.* Deunewitz, after his victory over the French, was endowed with the words "Deunewitz 6. September, 1813." Nelson, in commemoration of his victory over the combined fleets of France and Spain, bore Trafalgar on his

shield. Sometimes merely initial letters are employed in a manner likewise commemorative. Thus the letters F F F, the initials of "Felices fuerunt fideles," were bestowed by Felix du Muy upon the family of Felix *v.* Amadeur, because he alone remained true to his cause in the city of Rivoli at the time of an insurrection in Piedmont. Greek initial letters or abbreviations are also employed on some ancient devices. Thus, I H C, an abbreviation of *Ιησους* (Jesus), is mentioned by Berna, as also the letter X, crossed by a P, with a lengthened stem, referring to the name *Χριστους* (Christ). These latter devices were originally employed as banner inscriptions by Greek emperors converted to Christianity, though now used on several German coats of arms.

The history of a motto is often the most interesting subject presenting itself in connection with an armorial device. Such is that of the motto, "Le roy l'emporte sur le sang," borne by the Spanish house of Guzman. When Don Alonzo Perez de Guzman was governor of Tarifa, in 1293, he was beseiged in that town by the Moors, who, having taken his son captive, summoned him to surrender, or submit to the murder of his son. Guzman flung a poinard to his enemies, exclaiming "Le roy l'emporte sur le sang," and was afterwards permitted to bear those words as a memento of his loyalty.

Likewise indicative of self-sacrificing devotion is the motto of the Earl of Rothes, "Grip fast;" though conveying no distinct sentiment when viewed by itself, it becomes beautifully luminous when viewed in the light of history. As the good Queen Margaret of Scotland was attempting to ford a stream, her palfry grew weak and she was in danger of immediate death. Bartholomew Leslie hurried to the rescue of the drowning queen, and, as she clung to his girdle, he employed the homely words which have constituted the motto of his house ever since.

Thus beautifully do all the elements of this science contribute to the fostering of the noblest virtues, and, by continually recalling the deeds of noble ancestors, a new stimulus is afforded to existing generations to emulate the virtues and to add some new significance to an inscription bought, perhaps, at the peril of life, and rendered doubly valuable in its long descent through hands not less brave than those who first won the shield. A pious motto is thus made the nurse of religion, and a moral sentiment the herald of virtue to ages yet unborn.

With whatever allowances we may look upon the distinctions of heraldry, founded, as they are, upon mere physical power and endurance, in an age when higher culture than proficiency in the arts of war seemed impossible, we cannot but rejoice that we live in an age when the "victories of peace" are conceded to be greater than those of war. A system as cruel and barbarous as this appears in the light of succeeding times, which, with all its excellencies, was yet often the nurse of idleness, and which, withal, turned the channel of popular thought away from fields of greater and more enduring usefulness, is still only worthy of the dark periods in which its history was formed. Well may we rejoice that to the absurdities of Quixotic expeditions have succeeded patient journies into realms of thought; that to-day the palm is awarded to persevering and earnest endeavour in the useful arts and sciences of life, while our noblest trophies are those of honour won in the arena of virtue.

The recoil from all endurance of aristocratic pretentions, which our forefathers experienced through the impositios of England, led, not only to an abhorrence of its forms no government, but to every thing which savoured in any w ay of the rights of exclusive classes. Titles of nobility, and other similar modes of distinction, were for ever made impossible by the terms of the National Constitution; and in the absence of all peculiar rights attaching to persons bearing arms, who had emigrated from the mother country, the insignia themselves became obliterated, and all trace of privileged orders was lost. Nor does there seem to be any disposition to return to a usage thus abandoned after a century of experience in its absence. However, in other respects, we may be undergoing changes in the structure of our national life and thought, in this there seems to be but little alteration; and the refusal of Congress to accede to our ambassadors at foreign courts the right to assume any peculiarities of dress to indicate their representative character, seems to be a new expression of the popular abhorrence of all the adjuncts of aristocracy.

Whether we are wise, or even consistent, in the lengths to which we go in this matter, may admit of some doubt; for while we have steadily refused all badges of civil distinction, we have not failed to bestow medals of military honour upon those who had won distinction on the battle-field, while the uniformity with which corps badges, and other marks, are worn by the heroes of our late civil strife, would

indicate rather a prejudice against the form in which the principles of heraldry have hitherto approached us, than an opposition to those principles themselves. Man is more easily moved to exertion by honours admitting of public display, than he is by more substantial benefits; and it is probable that this truth may yet be improved to the advantage of great culture in learning and art, and to the fostering of those talents upon the application of which to the common pursuits of life our welfare and growth depends. Thus a system of honours, properly devised and allotted, might be made to do for our higher civilization what the science of heraldry has done for the past.

Still it must not be forgotten that the only enduring stimulus to high and noble effort will be found in the continued elevation of the popular mind to the nobility of doing good for its own sake, and to our expectation of finding virtue's reward in virtue itself. Cardinal Woolsey's experience of the emptiness of kingly honours is only the expression of an eternal truth, and we do well to remember what was so beautifully written by Grey:

> "The boast of heraldry, the pomp of power,
> And all that beauty, all that wealth e'er gave,
> Await alike the inevitable hour,
> And paths of glory lead but to the grave."

IX.—NOTICES AND CRITICISMS.

BELLES-LETTRES.

Kathrina; her Life and Mine, in a Poem. By J. G. Holland, author of "Bitter Sweet." 12mo, pp. 287. New York: Charles Scribner & Co. 1867.

This is the first of Dr. Holland's works we have taken the pains to read, and we confess that it has agreeably surprised us. Other books of his we had, indeed, glanced at; but, whatever was the reason, it so happened that they did not impress us favourably, and we laid them aside. We abstained from criticising them for two reasons; first, because we did not see that their influence was in any manner injurious, and, secondly, because we never wish to say disagreeable things when not provoked to it.

Nor do we wonder now that we were not pleased on former occasions, for there are passages in the volume before us also, which, had

we happened to read them first, would most probably have discouraged us from proceeding any further. We are sincerely glad that it was not so, for there are pages in "Kathrina" from which we have derived that pleasure which the true poetic spirit alone can afford. It is true that these are not numerous. At least half the poem consists of a rather dry narrative; a considerable portion of this is decidedly prosy and common-place; but, for our own part, we would wade through ten times as much crude matter, even when we have least time to spare, for the sake of the beauties that are so eratically interspersed through it, as almost to remind one of amaranths, jessamines, and daffodils in a heath, which, in all other respects, seems barren and unattractive.

But the more we examine the compound, the more certain we feel that the *tout ensemble* will have numerous readers. In short, we no longer wonder that Dr. Holland's books are said to be very popular, if they are all like this in their general characteristics; for, although there is far too much in "Kathrina" that is suggestive of Tupper, even when he is dullest and most inflated, we are so agreeably reminded in turn, and at constantly varying intervals, of the fiery passion of Cowley, the calm tenderness of Keats, and the quiet pathos of Goldsmith, that we very willingly and easily forget the dreary stages of our journey. Nay, we begin to ask whether it is not as well after all that we have to search—sometimes laboriously and long—for beauties, and we remember that Voltaire tells us, in some of his happiest lines, that if beauty were common it would diminish in value—

"Le beau, s'il est commun, doit perdre de son prix."

The poem before us is in the autobiographical form, which has lately become so fashionable; but, in our opinion, it is greatly superior in originality, as well as in dramatic interest, to Longfellow's "Wayside Inn," and to Bayard Taylor's "Poet's Story," both of which we have carefully reviewed in this journal. We are no admirers of this style of writing; we think it is egotistic at best; but it becomes particularly objectionable when the author introduces his wife to his readers, even though she be only an imaginary "better half." Holland has profited in this respect from the experience of Taylor, who, we fear, was more laughed at than admired for his domestic revelations.

But there was no need for the "Tribute" to woman at the beginning of "Kathrina;" every one of those nineteen stanzas, occupying six pages, is superfluous. We can inform the poet that, although the ladies have the name of being vain, they do not relish formal eulogies; nor are they the best poets who have bestowed such on any save their mistresses. In all other circumstances incidental compliments are the best, such, for example, as that of Campbell:

"The world was sad!—the garden was a wild,
And man, a hermit, sighed—till woman smiled."

Now these two lines are vastly more to the purpose than the nineteen stanzas of Dr. Holland, although the latter are quite well written, and by no means unpoetical. A poem, the avowed object of which is to illustrate the power of women in ennobling and elevating man, is rather marred than adorned, or aided, by a prologue of this kind. Under the most favourable circumstances it is tiresome, even in poetry, to dilate on what everybody knows, and the loveliness, kindness, and generosity of woman are as universally acknowledged by "the rudest portraiture of man," as the vivifying light and heat of the sun.

But it is not so clear that woman has so much to do with the elevation of man, as our poet sets forth in his "Katharina." That some women elevate and ennoble their husbands, far be it from us to deny; but whenever this happens, the intellect of the former, not that of the latter, is the masculine one. There is no law of nature more universal than that, if two persons are placed in permanent contact with each other, the one who has the stronger intellect will exercise an ascendancy over the one who has the weaker. In accordance with this law a great many women rule their husbands; and it is perhaps well for the world that they do so.

But, unhappily for the theory of our poet, it has frequently happened that the greatest men had the worst wives, or no wives at all. If the spouse of Virgil was not very much wronged by her contemporaries, she did not contribute much to the elevation of her husband; it is certain, at all events, that she never inspired him to write the Æneid. Still less was Milton inspired by his better half; and nowhere is he more eloquent, or poetical, than in the scornful speech which he put into the mouth of Samson against his wife, Dalila, who, instead of elevating or ennobling him, had betrayed him to his enemies:

> "Out, out, Hyæna, these are thy wonted arts,
> And arts of every woman false like thee."*

And if we pass from the realms of poetry into those of philosophy and science, without mentioning Mrs. Job, who advised her husband in his troubles to curse God and die, we shall not find the facts materially different in this respect. Thus, for example, none who have read Plato or Xenophon are of opinion that Socrates was much elevated or ennobled by Xantippe. Kepler, whose discoveries won him the proud title of Legislator of the Heavens, was sometimes elevated by his wife, but the means which the lady is said to have used was her broomstick. Neither Copernicus nor Newton had a wife; but we think it is very doubtful whether, if both had wives, they would have made more important discoveries than they did.

Ferguson, the astronomer, had excited the wonder of all who knew him

* Samson Agonistes, 747 et seq.

before he was blessed with a wife. His being a poor shepherd's boy was no barrier to his attaining eminence in the noblest of sciences; but how he was aided by his wife, may be inferred from the following incident: One evening Ferguson was to have delivered a lecture illustrative of the movements of the heavenly bodies; just as he was about to commence his wife rushed into the hall in an excited manner, and applied a club to his costly apparatus, so that it tumbled about his ears. All he had to say was this: "Ladies and gentlemen, it is my misfortune to be married to this lady." We feel sure that there was not one of these illustrious persons who did not regard woman as very beautiful, amiable, generous, &c., but we think it may be questioned whether the most susceptible and appreciative of them regarded her as capable of elevating or ennobling them.

In a word, it is for her womanly virtues that woman should be praised, not as the guide and director of man. Much as Dante loved Beatrice, he preferred to choose Virgil as a guide, whether he entered hell, purgatory, or paradise; and we think that if many of our authors of the present day would pursue a similar course, we should not hear so much about "woman's rights," and kindred theories, as we do, and the sex would rather gain than lose by entrusting those rights to their husbands, fathers, and brothers.

It must not be denied, however, that there is some system in the poem of "Kathrina," and that it can afford to discard the introductory "Tribute." It is divided into four parts; the first embracing Childhood and Youth, and uttering a Complaint; the second Love, and the Reflection that follows it; the third Labour and Despair; the fourth Consummation. This arrangement of the piece enables the author to give free scope to his various powers, and those who follow him carefully, without being discouraged by spots here and there, which are either barren or covered with rank weeds, will admit that, upon the whole, he has done so with pretty good effect. But we will let him speak for himself, although, in doing so, we cannot cull very carefully, but must content ourselves with such passages as are at once most easily detached, and most suitable, from their comparative brevity, for our limited space. Omitting a portion of his description of his native "queen-village," because rather exaggerated for our taste, we transcribe the following, asking the reader to bear in mind, in justice to the author, that it is but a middle fragment:

> "In an old home, beneath an older elm—
> A fount of weeping greenery, that dripped
> Its spray of rain and dew upon the roof—
> I opened eyes on life; and now return,
> Among the visions of my early years,
> Two so distinct that all the rest grow dim:
> My mother's pale, fond face and tearful eyes,
> Bent upon me in Love's absorbing trance,

From the low window where she watched my play;
And, after this, the wondrous elm, that seemed
To my young fancy like an airy beak,
Poised by a single stem upon the earth,
And thronged by instant marvels. There in Spring
I heard with joy the cheery blue-bird's note;
There sang rejoicing robins after rain;
And there within the emerald twilight, which
Defied the mid-day sun, from bough to bough—
A torch of downy flame—the oriole
Passed to his nest, to feed the censer-fires
Which Love had lit for Airs of Heaven to swing."—Pp. 17, 18.

None will deny that there is melody in this; nor will those acquainted with the village of Northampton, Massachusetts, and its neighbourhood, deny that, as far as it goes, it is true to nature. But we cannot turn a leaf without giving a few lines more—those in which the hero begins to let us know how he has discovered that his father committed suicide:

"My Mother and the elm! Too soon I learned
That o'er me hung, and o'er the widowed one
Who gave me birth, with broader boughs,
Haunted by sabler wings and sadder sounds,
A darker shadow than the mighty elm!
I caught the secret in the street from those
Who pointed at me as I passed, or paused
To gaze in sighing pity on my play."—P. 19.

This awakens a strong interest in the reader, investing the hero, as it does, with an air of mystery. A little further on we have an account of a chase after a pet lamb, which, at the beginning, seems rather puerile, but acquires a certain fascination as it proceeds, which will not allow us to wish that it had given place to some more startling incident; and still less willing are we to discard it when we see what agreeable scenes it leads to. These, however, we must allow the reader to discover for himself, and pass on rapidly to the "Complaint." In this the poet soars quite high. There is genuine pathos in the following strain; and sad and rather discouraging as its tone is, we cannot conceal from ourselves that it is but too true to nature:

"River, sparkling river, I have fault to find with thee:
River, thou dost never give a word of peace to me!
Dimpling to each touch of sunshine, wimpling to each air that blows,
Thou dost make no sweet replying to my sighing for repose.

"Flowers of mount and meadow, I have fault to find with you;
So the breezes cross and toss you, so your cups are filled with dew,
Matters not though sighs give motion to the ocean of your breath;
Matters not though you are filling with the chilling drops of death!

"Birds of song and beauty, lo! I charge you all with blame:—
Though all hapless passions thrill and fill me, you are still the same.
I can borrow for my sorrow nothing that avails
From your lonely note, that only speaks of joy that never fails.

"O! indifference of Nature to the fact of human pain!
Every grief that seeks relief entreats it at her hand in vain;
Not a bird speaks forth its passion, not a river seeks the sea,
Nor a flower from wreaths of Summer breathes in sympathy with me."
—P. 65, 66.

Without making any comment on these lines further than to ask how many are there of those who *think*, that have longed for this sympathy in adversity and grief, but done so in vain, we hurry on to the chapter devoted to the gentle passion. As the hero is passing along the road, listlessly, without any definite object, he is attracted to a church by a voice, which he thinks is that of a woman or an angel:

"I heard the sound of flutes
And hoarse, sonorous viols, in accord
With happy human voices,—and one voice—
A woman's or an angel's—that compelled
My feet to swift approach. A thread of gold,
Through all the web of sound, I followed it
Till, by the stress of some strange sympathy,
And by no act of will, I joined my voice
To that one voice of melody, and sang.

"The heart is wiser than the intellect,
And works with swifter hands and surer feet
Toward wise conclusions. So, without resort
To reason, in my heart I knew that she
Who sang had suffered—knew that she had grieved,
Had hungered, struggled, kissed the cheek of death,
And ranged the scale of passions till her soul
Was deep, and wide, and soft with sympathy;—
Nay, more than this: that she had found at last
Peace like a river, on whose waveless tide
She floated while she sang. This was the key
That loosed my prisoned voice, and filled my eyes
With tender tears, and touched to life again
My better nature."—P. 74, 75.

The lady is described very happily in brief touches, according as an accidental glimpse is got of her, from time to time. The following lines will serve as a specimen of these fitful pencilings:

"One head, that crowned a tall and slender form,
Was bowed with reverent grace upon the rail
Before her; and, although I caught no glimpse
Of her sweet face, I knew such face was there,
And there the voice."—P. 76.

The lady thus described has become a convert; she is baptized in the presence of the congregation; and her prepossessing appearance, her beauty, and piety interest all, more or less, in her destiny. The effect on Paul (the hero) is thus described:

"All this scene
I saw through blinding tears. The poetry
That like a soft aureola embraced
Within its cope those two contrasted forms;

The eager observation and the hush
That reigned through all the house ; the breathless spell
Of sweet solemnity and tender awe
Which held all hearts when she, The Beautiful,
Received the sign of marriage to The Good,
O'erwhelmed me, and I wept. Shall I confess
That in the struggle to repress my tears
And hold my swelling heart, I grudged her gift,
And felt that, by the measure she had risen.
She had put space between herself and me,
And quenched my hope?"—P. 80.

The fates proved favourable, however; the lady was wooed and won. We should like to give some of the details in this part of the narrative, for they are marked with a freshness and melody which we do not often meet with in our researches in modern poetry. The Reflection that comes after love we are obliged to pass over; nor can we pause to admire the eloquent and pleasing strains in which our poet portrays the atttractions and rewards of labour. But we cannot pass over his picture of Despair; for, in our opinion, it is in the sad and pathetic his strength lies; in no branch of his subject does he succeed so well in enchaining our sympathies as in that which he seeks to invest with a tragic interest. Few have described more faithfully that despair which too often follows the attainment even of the goal of our ambition. Two stanzas will sufficiently attest this:

"The honey-bee hoards for its winter-long need,
The treasure it gathers in joy from the flowers ;
And drinks in each sip of its silvery mead
The flavor and flush of the sweet summer hours.

"But a pleasure expires at its earliest breath :
No labor can hoard it, no cunning can save ;
For the song of its life is the sigh of its death,
And the sense it has thrilled is its shroud and its grave."—P. 250.

When we first glanced at the several divisions and subdivisions of "Kathrina," the seeming incongruity reminded us rather forcibly of the Horatian warning against painting dolphins in the wood, or wild boars in the sea:

Qui variare cupit rem prodigaliter unam,
Delphinum silvis appengit fluctibus aprum.*

But, although we have still to blame him for the loose, rather incoherent structure of his poem, and think that a little art in this respect, so exercised as not to be apparent as such, would have improved it much—yet we must admit that, upon the whole, he has turned his materials to good account. There is a certain charm, even in those abrubt transitions of his, which we would hardly

* De Arte Poetica, 29, 30.

exchange for that of the finest symmetry. We find that we have already occupied much more than the space which we had prescribed for our review of "Kathrina;" and yet we must make room for another passage or two. We have now come to the "Consummation"—a part of the poem so sadly tragic as fully to justify its title. The good, fond, and beloved wife, who has so long been the guide and comforter of her husband, is at length overtaken by disease; she lies prostrate and helpless, but patient, resigned, and as cheerful and kind as ever. The husband has a presentiment of the calamity that awaits him; he fancies he sees death watching in every corner; now threatening, now mocking:

> "A guest was in my house—a guest unbid—
> Who stayed without a welcome from his host;—
> So loathed and hated, on such errand bent,
> And armed with such resistless power of ill,
> I dared not look him in the face. I heard
> His tireless footsteps in the lonely halls,
> In the chill hours of night; and, in the day,
> They climbed the stairs, or loitered through the rooms
> With lawless freedom."—P. 257.

At length the grim and loathed intruder addresses him, pursues him from place to place, and the more he wrings his soul with grief and anguish, the more pertinaciously he pursues him from one room to another as if he delighted in his suffering:

> "'This little room,
> Where you have breakfasted and dined and supped,
> And laughed and chatted in the days gone by,
> Will be a lonely place when we are gone.
> Those roses at the window, that were wont
> To bloom so freely with the lady's care,
> Already miss her touch. That ivy-vine
> Has grown a yard since it was tied, and needs
> A training hand.'"—Pp. 258, 259.

The fiend mocks at her casket, her wardrobe, her slippers, &c., in turn; but we can only make room for one passage more:

> "'This way! Let us take our stand
> Beside her bed. Not quite so beautiful
> To your fond eyes as when she was a bride,
> Though still a lovely woman! Seems it strange
> That she is yours no longer?—that her hand
> Is given to another—to the one
> For whom she has been waiting all her life,
> And ready all her life? Your power is gone
> To punish rivals. There you stand and weep,
> But dare not lift a finger, while with smiles
> And kindly welcome she extends her hands
> To greet her long-expected friend.'"—Pp. 260, 261.

Now, we ask, is it any wonder that "Kathrina," with all its incongruities and defects, is much read? We propose this question most con-

fidently, although, in our hurried glance at the poem, we have not been able even to allude to scenes and descriptions which would have been sufficient, by themselves, to recommend the poem to a large class of readers.

Opportunity. A Novel. By ANNE MONCURE CRANE, author of "Emily Chester." Pp. 336. Boston: Ticknor & Fields. 1867.

WE regret to think that Mr. James T. Fields is not well—that, at best, he must be labouring under an affection of the eyes. This is the only theory upon which we can account for the appearance of the imprint of his house on certain recent books, among which we must include that now before us. Books bearing his *fiat* have been respectable literary efforts in the worst of times; they have been at least readable, because he possesses not only a good understanding, but a cultivated, discriminating taste—nay, literary ability of a high order, as some of his poetical effusions quite charmingly prove.

We may be mistaken, but we cannot help thinking that "Opportunity" has been "passed upon" by one whose own opportunities have been somewhat neglected. It is all the more painful to us to say so, we can assure all concerned, because it seems to be the production of a lady; but there is really nothing in it that is of any conceivable use. The first paragraph of it is highly characteristic, though much better than an average specimen; here it is: "'The hills and vales of pleasant Maryland,' quoth a correspondent of the London Times. And we, to whom those hills and vales are home, respond amen devoutly." The quotation and the piece of information that accompanies it are equally important; certainly they are as much so as any to which we are treated afterwards. If the first paragraph has not much pith or point, it is at least not so turgid—it does not do so much violence to language or to common sense, as almost every other paragraph does to a greater or less extent.

None will accuse us, we trust, of prejudice against Southern authors, male or female; it is much more our disposition, and always has been, to remove such feeling from all who entertained it. We think we indulge in no exaggeration when we say that there are five hundred young ladies in the South—nay, almost in "pleasant Maryland" alone—who could have written a much better book than this. We mean no disparagement of the ladies of any other part of the country, or of the world, when we remark, as the result of our observation and experience, that if the Southern ladies do not write as many books as others in proportion to their number, it is not because they are deficient in intellect or talent, but because they are more domestic in their habits and feelings; because instead of courting fame or notoriety, they shrink instinctively from it.

But, regarded in any light, the performance now before us

is no fair specimen of the productions of Southern ladies; so well convinced are we of this, that did not "Opportunity" come to our table from one of the most honourable publishing houses in America we could hardly have helped considering it a burlesque gotten up by some Radical fanatic who attired himself in crinoline and fixed his habitation in "pleasant Maryland" for the occasion. Even as the case stands, we are by no means sure of the sex of the author, especially when we remember that there are certain members of the Freedmen's Bureau whose style it recalls very forcibly; and who, we fear, would not scruple to foist their productions on some of the good-natured junior partners of Mr. Fields, as those of female geniuses.

But let us see what the style is; for what the story is, or means, we really cannot tell, although we have tried pretty hard to discover and follow its thread. After wading through two chapters of introductions to some children, their papas, mammas, &c., we are allowed to see the University of Virginia, as well as we can do so, through a pretty thick fog. Chapter III. opens as follows: "It had long been decided that, when the education of the boys was *sufficiently advanced*, they should go to the University of Virginia to *complete* it." This affords an opportunity of indulging in some very fine writing. Douglas, we are told, was awfully concerned at "how greatly his father and Rosy would miss him, added to the *physical cli ging* to long-accustomed *scenes and faces* characteristic of *strong, tenacious natures*." (P. 38.) This physical clinging to scenes and faces may probably be ranked among the modern improvements in novel-writing.

It was Cassie Hall, and not Rosy, that was, "of course," to have missed Grahame. That the latter, too, was in a sad plight, will be sufficiently understood from the fact that he had a certain "problem" about Cassie "which made *both heart and head ache to solve*." (Ib.) Nothing serious happened, however, for we are informed, in the next sentence, that "he ended characteristically by surrendering *himself and his will* to *the current of outside circumstances*." This is followed by very instructive remarks on University life, which show, among other things, how all the students don't "get on" with each other. Of Grahame, we are told that, "Inferior as he was to nearly all the *older* ones in knowledge, he was greatly their *elder and superior* in taste." (P. 40.) What may be meant here by knowledge and taste, respectively, we cannot pretend to understand. But our author continues: "Their *rough, immature ways and opinions* annoyed and disgusted him." His "ways" were, of course, not "immature," nor were his "opinions rough;" but we may thank the beloved girl at home for this, at least in part, for we are informed a little further on that, "For six months Grahame sorrowed, and *really pined in mind and body* for the *brightness* of the fair Cassie." (P. 48.)

We hope it is not usual for the students of the University of Virginia to pine in mind and body at the same time for the brightness of their Dulcianas. Be this as it may, it seems that the thing agreed very well with Grahame Ferguson, for, in a short time, his fellow students "waked up to the fact" that he had become a smart fellow; and then they "*instantly* pardoned all early feelings and *disagreeabilities*, recognizing what they thought inherent faults as mere *chrysalisism*, only serving to *guarantee* the genuineness of the present butterfly state." (P. 48.) Does not this show that his fellow-students must have been nearly as clever as himself? but it may also remind one of a little hint given by Boileau, that even fine-sounding, big words, had better be used with some economy:

"Tout ce qu'on dit de trop est *fade* et *rebutant*."*

Our author describes her ladies pretty much the same as she does her gentlemen, the chief difference being that she is not quite so enthusiastic in her praise of the former. Thus, for example, in portraying Henrietta Dangerfield, she says: "Figure *large and overgrown*, ungraceful from *immaturity*, though not from positive defect." (P. 88.) Doubtless her bosom was not so handsomely developed as that of a more mature lady who was not so "large and overgrown" in other respects, and yet, for aught we know, it may have been the bosom itself that was overgrown, or, perhaps, the lady's hair. Be this as it may, we are informed, in the next page, how no two could agree as to the shade of her eyes, "either in her present *chrysalis state*, or in her developed womanhood. My own opinion is," continues our author, "that their *seemingly achromatic brilliancy* possessed all tints," &c. (P. 89.)

Harvey Birney, whom we may regard as the heroine, has also a rather curious "woman's nature," both before and after its "development." When her lover addresses her in his "magnificently vehement way" (p. 90), she looks "up at him with *perplexed astonishment dawning* in her face." (P. 91.) At another time he approaches her in a state "which was *outwardly deference* and *inwardly nervousness*." (P. 143.) Although he did not "*accentuate* the claim his presence made upon her attention," she "turned slightly towards him, it almost seemed *magnetically drawn*." (Ib.) Of course he was "absolutely dazzled." "The glad light, which was *unconsciously welling up* from *the unfathomable depths* of her eyes, *had floated over her whole countenance*, covering it with such a radiance that it seemed to look out at him from a golden mist. In that following second Grahame Ferguson *reached* and *fulfilled* his *uttermost capacity for life and happiness*." (P. 143.)

The latter expression we regard as the modern way of saying that

* L'Art Poétique, chant 1.

he pressed the lady's lips; perhaps we are mistaken, however. At all events it seems that, leaving him in his "divine delirium," Harvey passed him and went out by the nearest door, *drawing from him his preternatural vitality* as suddenly as she had *endowed* him with it." (Ib.) We confess that we begin to feel that it would require us to be "endowed" with "preternatural vitality" to accompany our author any farther, and, therefore, beg leave to content ourselves with allowing others to discover what "Opportunity" means.

1. *Opposite Neighbors; or, the Two Lives and their End.* 16mo, pp. 400. 2. *The Orphans of Glen Elder.* 16mo. pp. 232. 3 *Waiting for the Morning.* 16mo, pp. 230. Philadelphia: American Sunday School Union.

We have examined these three volumes with as much attention as if they were intended for the most learned and thoughtful of our readers, because we think that no books exercise a more enduring influence for good or evil, than those put into the hands of children, or into those of the large class of adults who, for want of proper education, are but children in intellect and understanding, no matter how mature in years. These now before us are designed for the young and the poor—for the working man and woman, as well as for boys and girls; and it affords us sincere pleasure to find that they are well calculated for their double purpose. None of them is sectarian in any objectionable sense. In accordance with the avowed object of the Society that issues them, each is such that all Christian sects may *unite* in reading them, and profiting by their teachings.

It is because the publications of the Protestant Episcopal Sunday School Union are generally distinguished by the same characteristics, that we have taken pleasure in recomending them from time to time; and our readers will remember that we never recommend books that are offensive to any Christian sect; our impression of such being that they do more harm than good; that no one is converted by ridicule or abuse of the religion in which he has been brought up, and perhaps his ancestors before him for generations.

The "Opposite Neighbors" is one of the best religious stories we have ever read. It shows very successfully, both by precept and example, how even our servant-maids may bring credit or disgrace on themselves according as they are industrious or indolent, modest or vain, fond of attending to their business and pleasing their mistresses, or of night-walking and bad company. But this is not the only important lesson which it teaches; it also illustrates, in a very striking manner, the difference between being a house-servant or a shop-girl; and it must be admitted that nowhere in the world is this lesson more necessary than in this country. Everyone is aware of the misery which thousands of young

women suffer in all our large cities, sewing, or working in factories for a mere pittance, rather than incur the disgrace, as they think, of being servants.

In this book Letty represents the industrious, faithful, obedient servant-maid, of whom, in return for those good qualities, her mistress is almost as careful as she is of her own daughter. Upon the other hand, her cousin Agnes disdains to be a servant, but works in a shop, where she soon learns other vices, as well as foolish pride and vanity. Letty receives the attentions of one who is industrious like herself; Agnes depends more on show and flourish than on industry in choosing her husband. Both get married in due time; but while Letty's husband rises from the position of a poor house-carpenter in a country village to that of a respectable architect, the husband of Agnes becomes a gambler, and beats his wife, who, if possible, is still more degraded than he. The child of the latter is murdered by its parents. Soon after the mother dies by disease, brought on by her own reckless conduct, and the bad treatment of her husband, the once despised servant-maid taking charge of her two surviving children. The story is well told, and possesses much dramatic interest. If every poor girl, who has to choose between becoming a house-servant and a shop or factory girl, could be induced to read it, we think the author would have reason to congratulate himself on the good he has done.

"The Orphans of Glen Elden" belongs to a different class. It is intended chiefly for children, and yet there are none so old or wise but they may profit more or less by its unpretending lessons. The scene of the story is laid in Scotland, and it illustrates some of the best traits in Scottish character. Several of the characters are more skilfully portrayed than those we find in many fashionable novels of high pretensions. This is true, for example, of Mr. Butler, the schoolmaster, also of Mrs. Blair, and of Archie and Lilias. The scene in which the good old pedagogue appears at the residence of Mrs. Blair, and requests as a favour that young Archie may be permitted to remain with him during the long nights of winter, finally making certain revelations which prove his gratitude and kindness, is replete with interest. (125 et seq.)

"Waiting for the Morning," is of a lighter character. It contains scenes that will amuse the little ones, while they give them salutary impressions not likely to be forgotten soon. There is no one so grave but that he has sometimes to smile at the conversations of half-grown children, especially at some of their questions and answers. Very good specimens of these juvenile discussions are to be found in this tiny volume—specimens, which we confess have amused ourselves not a little; and, accordingly, we do not hesitate to recommend it with the other two which accompany it.

TRAVELS.

The Land of Thor. By J. Ross Browne. Author of "Yusef," "Crusoe's Island," "An American Family in Germany," &c. Illustrated by the Author. 12mo, pp. 542. New York: Harper & Brothers. 1867.

We regard it as an encouraging sign of the times that the Messrs. Harper are resuming the publication of that thoughtful and substantial class of works which, in times past, had given them so just a claim to the gratitude of the American people. It is but simple justice to them to admit that, for a long series of years, they continued to publish the best works in every department of literature, science, and the arts. When the great civil war commenced they substituted a lighter class of publications, though still giving us an occasional standard work. We sincerely regretted the change, and made some criticisms on certain of their new issues: but even these we regarded as inferior only to those which had come previously from the same press: so that in the worst times we have had less fault to find with the Harpers' books than with any others in the same department published in this country. Accordingly, our readers will do us the justice to remember that, while no publishers in this country have published more in our time, none have been less criticised by us. We now congratulate the public on their resumption of the old, substantial, and invigorating publications; nor do we conceive that any one has a right to complain if the "light literature" continues to be furnished for the use of that numerous class who, if they had not this, would feed on a much less wholesome article.

We do not, however, regard the work now before us as a fair specimen of the solid class of works to which we have been alluding; at the same time it is an interesting and instructive book; we have never found grave fault, and never will, with any work of equal merit, no matter who is its author or publisher. Mr. Ross Browne is a very agreeable travelling companion; we remember no recent writer who has the faculty, in so high a degree, of leading one into so many distant countries, and keeping his curiosity on the alert all the time, without tiring him. To this observation we need hardly add that he is remarkably free from affectation; if he makes any attempt to impose on our credulity by relating wonderful things that never happened, he has taken good care that we cannot see it.

Yet there are wonders enough in his book. Nor does he interest us merely when telling us strange things, or describing foreign scenes that we can never witness. He intersperses his stirring incidents and 'hairbreadth 'scapes' with some quiet touches of humour, which would almost sufficiently account, by themselves, for the

attractiveness of the book. An illustration of this characteristic may be found in almost any chapter we turn to. But, before giving any specimen, it is proper to remark, in general terms, that the title of the book is quite appropriate, since it takes us into all places of interest in Russia, Sweden, Norway, Denmark, Finland, Iceland, the Faroe Islands, &c., and gives us a very pleasant insight into the manners, customs, and curiosities of each.

But, in alluding a moment ago to the author's quiet way of investing with interest scenes which one may witness without ever leaving our own shores, we happened to have our eye on one of those pages in which he gives us an account of his voyage to Christiania; and we think we cannot give our readers a more correct idea of his style than by snatching the following fragment from this chapter:

"The weather was thick, and nothing was to be seen in any direction but a rough chopping sea and flakes of drifting fog. A few doleful-looking tourists were searching for the land through their opera-glasses. They appeared to be sorry that they ever undertook such a stormy and perilous voyage, and evidently had misgivings that they might never again see their native country. Some of them peeped over the bulwarks from time to time, with a faint hope, perhaps, of seeing something new in that direction; but from the singular noises they made, and the convulsive motions of their bodies, I had reason to suspect they were heaving some very heavy sighs at their forlorn fate. The waiters were continually running about with cups of coffee, which served to fortify the stomachs of these hardy adventurers against sea-sickness. I may here mention as a curious fact that in all my travels I have rarely met a sea-going gentleman who could be induced to acknowledge that he suffered the least inconvenience from the motion of the vessel. A headache, a fit of indigestion, the remains of a recent attack of gout, a long-standing rheumatism, a bilious colic to which he had been subject for years, a sudden and unaccountable shock of vertigo, a disorganized condition of the liver—something, in short, entirely foreign to the known and recognized laws of motion, disturbed his equilibrium, but rarely an out-and-out case of sea-sickness. That is a weakness of human nature fortunately confined to the ladies. Indeed, I don't know what the gentler sex would do if it were not for the kindness of Providence in exempting the ruder portion of humanity from this unpleasant accompaniment of sea-life, only it unfortunately happens that the gentlemen are usually afflicted with some other dire and disabling visitation about the same time."—Pp. 293, 294.

Several of the author's descriptions have a startling graphicalness which sometimes reminds one of Volney. This is true, to some extent, of the following passage, taken from his impressions of St. Petersburg:

"A vague sense of loneliness impresses the traveler from a distant land—as if in his pilgrimage though foreign climes he had at length wondered into the midst of a strange and peculiar civilization—a boundless desert of wild-looking streets, a waste of colossal palaces, of gilded churches and glistening waters, all perpetually dwindling away before him in the infinity of space. He sees a people strange and unfamiliar in costume and expression; fierce, stern-looking officers, rigid in features, closely shaved, and dressed in glittering uniforms; grave, long-bearded priests, with square-topped black turbans, their flowing black drapery trailing in the dust; pale women richly and elegantly dressed, gliding unattended through mazes of the crowd; rough, half-savage serfs, in dirty pink shirts, loose trowsers, and big boots, bowing down before the shrines on the bridges and public places; the drosky drivers, with their long beards, small bell-shaped hats, long blue coats, and fire-bucket boots, lying half-asleep

upon their rusty little vehicles awaiting a customer, or dashing away at a headlong pace over the rough cobble-paved streets, and so on of every class and kind. The traveler wanders about from place to place, gazing into the strange faces he meets, till the sense of loneliness becomes oppressive. An invisible but impassable barrier seems to stand between him and the moving multitude. He hears languages that fall without a meaning upon his ear; wonders at the soft inflections of the voices; vainly seeks some familiar look or word; thinks it strange that he alone should be cut off from all communion with the souls of men around him; and then wonders if they have souls like other people, and why there is no kindred expression in their faces—no visible consciousness of common humanity."—Pp. 12, 13.

We should be glad to reproduce Mr. Ross Browne's description of the celebrated Winter Palace of the Czar, for it is very vivid and interesting; but we prefer giving extracts on subjects which have been partly neglected by geographers and historians, as well as by travellers. It is true that this cannot be said of the Kremlin, and yet the picture we have of it in the volume before us is so vivid, and it dispels so many mistaken notions relative to that famous pile, that we feel constrained to make room for at least a fragment:

"The Kremlin, as it now stands, is a large collection of palaces, public buildings, and churches, situated on the crown of a high bank or eminence on the left side of the Moskwa River, nearly in the centre of the city. It is surrounded by a high embattled wall, forming something of a triangle, about a mile in circumference, through which are several massive gateways. This wall is very strongly constructed of stone, and is about twenty-five or thirty feet in height. It forms many irregular sub-angles, and is diversified in effect by numerous towers, with green pyramidal roofs; abutments and buttresses; and a series of guard-houses at intervals along the top. The general color is white, making rather a striking contrast with the green-roofed towers, and the gilded domes and many-colored cupolas of the interior churches. Outside of this wall, on the upper side of the main angle, are some very pleasant gardens, handsomely laid out, with fine shady walks, in which many of the citizens spend their summer evenings, strolling about, enjoying the fresh air. Other parts of the exterior spaces are devoted to drosky stands, markets, and large vacant places for public gatherings on festa days and great occasions of military display. From every point streets diverge irregularly, winding outward till they intersect the inner and outer boulevards. These boulevards are large circular thoroughfares, crossing the Moskwa River above and below. They are well planted with trees, and have spacious sidewalks on each side; but, unlike the boulevards of Paris, are only dotted at irregular intervals with houses. To the eastward lies the Kitai Gorod, or Chinese City, and to the westward the Beloi Gorod, or White City.

"Isolated in a great measure from the various quarters of the city, Russian and Tartaric, by the gardens, the large open spaces, the markets and the river, the Kremlin looms up high over all in solitary grandeur—a mass of churches, palaces and fortifications, surmounted by the tower of Ivan Veliki, which stands out in bold octagonal relief against the one with its numerous bells swung in the openings of the different stages, thundering forth the hours of the day, or tolling a grand chorus to the chanting of innumerable priests in the churches below. Approaching the Spass Vorota, or gate of the Redeemer, through which none can enter save with uncovered heads—such is the veneration in which this Holy Gate is held by all classes—we witness a strange and impressive spectacle. Over this wonderful gate, incased in a frame covered with glass, stands the holiest of all the pictured relics of this sacred place, a painted figure of the Savior, emblazoned with gilding, and with a lamp swung in front, which burns night and day, as it has burnt since the days of Ivan the Terrible. Before this sacred image all true believers bow down and worship. While the great bells of the tower are booming out their grand and solemn strains, it is a pro-

foundly impressive spectacle to witness the crowds that gather before this holy shrine, and bend themselves to the earth—the rich and poor, the decorated noble and the ragged beggar—all alike glowing with an all-pervading zeal; no pretense about it, but an intense, eager, almost frantic devotion."—Pp, 137, 138, 139.

Our author describes the manners and customs of the Russians in a manner at once humourous and truthful. The following passage will serve as a specimen:

"A common thing in the streets of Moscow is to see a couple of sturdy beggars, uncouth as grizzly bears, meet and stop before each other with the utmost and most punctilious gravity. Beggar number one takes his greasy cap from his head slowly and deliberately, gives it a graceful sweep through the air, and, with a most courtly obeisance, exhibits the matted tuft, or the bald spot on the top of his head, to his ragged friend. Beggar number two responds in a similar courteous style, neither uttering a word. Each then gravely replaces his cap, touches the brim of it once or twice by way of representing a few extra bows, and passes on his way with an expression of profound dignity, utterly unconscious of the grotesque effect of all this ceremony to a stranger. I have seen the most vagabond-looking istrovoschik, or drosky-drivers, jump out of their drosky and perform similar courtesies toward each other; and where men of this craft are given to politeness, one may rest assured that it must be a national characteristic."—Pp. 156, 157.

But our space is becoming exhausted. We find we cannot accompany our author into Sweden, Norway, Iceland, or any other part of the great Land of Thor. Yet we must give one extract more; this we do for the benefit of the ladies, though we fear it will hardly reach those who need most to be benefitted:

"I must say that of all the customs prevailing in the different parts of Europe, not excepting the most civilized states of Germany, this one of making the women do all the heavy work strikes me as the nearest approximation to the perfection of domestic discipline. The Diggers of California and the Kaffres of Africa understand this thing exactly, and no man of any spirit belonging to those tribes would any more think of performing the drudgery which he imposes upon his wife and daughters than a German or Norwegian. What is the use of having wives and children if they don't relieve us of our heavy work? In that respect we Americans are very much behind the times. We pay such absurd devotion to the weakness of women that they rule us with a despotism unknown in any other country. Their smiles are threats, and their tears are despotic manifestoes, against which the bravest of us dare not rebel. It is absolutely horrible to think of the condition of servitude in which we are placed by the extraordinary powers vested in, and so relentlessly exercised by, the women of America. I, for one, am in favor of a revival of the old laws of Nuremberg, by which female tyranny was punished. By a decree of the famous Council of Eight, any woman convicted of beating her husband, or otherwise maltreating him, was forced to wear a dragon's head for the period of three days; and if she did not, at the expiration of that date, ask his pardon, she was compelled to undergo a regimen of bread and water for the space of three weeks, or until effectually reduced to submission."—Pp. 361, 362.

There are many other little customs styly alluded to by our author, which our readers will have to discover for themselves. In short, we cannot remember a book, at the present moment, which we could recommend in preference to this for the long, cold evenings now upon us.

Mr. Ross Browne is quite an artist as well as an author. His pictorial illustrations exhibit a good deal of humour, and contribute not a little to enhance the interest of the reader in the scenes and interests described in the letter-press.

HISTORY AND BIOGRAPHY.

Life and Letters of Madame Swetchine. By COUNT DE FALLOUX, of the French Academy. Translated by H. W. Preston. 16mo, pp. 369. Boston: Roberts Brothers. 1867.

OUR Catholic readers, at least, will be much pleased with this volume; but it is sufficiently interesting, altogether independently of its religious character, to repay the perusal of all who can appreciate the intellectual efforts of a highly gifted and cultivated woman. That the lady was born in Moscow, and has descended from an ancient Muscovite family, rather enhance the interest that attaches to her story. She was educated in the faith of the Greek Church, as her ancestors had been for generations. She read much; studied several languages; had always the benefit of the society of the learned and thoughtful; she corresponded with distinguished men and women in all parts of Europe; and the chief use she made of all these opportunities was to learn from them that the Catholic Church is nearer to heaven than the Greek Church. And we think there are not many Protestants who will deny this, however superior they may think their own religion.

Mr. Rounseville Alger furnishes a preface to this book, which is the most sensible piece of writing we have ever seen from his hand. "It may seem strange," he says, "that a work so eminently Catholic in its quality as this biography should be introduced to a Protestant people by a Protestant translator and Protestant publishers. But, on further consideration, will not this be found especially fit and serviceable? In this country a *traditional antipathy*, or *bigoted repugnance* to the Catholic Church prevails in an unjustifiable extreme. Whatever is repulsive in the Catholic dogmas or rule is fastened on with unwarrantable acrimony and exclusiveness. *The interests alike of justice and of good feeling* demand that the attention of Protestants shall, at least occasionally, be given to the best ingredients and workings of the Catholic system."

We need hardly say that we fully concur in all this, for our readers are aware that it is the spirit in which we have always written. Mr. Alger may add, in his next edition, if he please, that a Protestant reviewer has been quite as willing as either Protestant translator or Protestant publisher to introduce the book. It is not alone in our own journal that we have been trying to remove this "traditional antipathy or bigoted repugnance;" we had written in the same spirit in other periodicals before we had issued a number of the "National Quarterly Re-

view;" and done so at the risk of having our articles rejected on account of that spirit.*

Whether we have had any success in our efforts our readers can best judge; although we may be permitted to think ourselves that we have contributed something to so desirable an end; but were it otherwise, we should consider it an honour to have made the attempt to do justice to an institution, which, for nearly eighteen hundred years, has not ceased for a single day to improve the condition of the human race intellectually, and morally, as well as religiously.

But, as we have already remarked, the volume before us is not interesting merely as the life of a highly gifted lady, who is already regarded almost as a saint by a class whose opinions must be respected; the insight which it gives into the political, social, moral, and religious condition of the Russian empire would have given it a strong claim on our attention by itself.

Bench and Bar; A complete Digest of the Wit, Humour, Asperities, and Amenities of the Law. By L. Bigelow, Counsellor at Law; with Portraits and Illustrations. 12mo, pp. 364. New York: Harper & Brothers. 1867.

A very entertaining and agreeable volume. It is not alone those that are interested in the law who will find it attractive; it will prove so to all capable of relishing wit and humour, knowledge and wisdom, for it presents us characteristic sketches of the most eminent jurists and advocates of England, Ireland, and Scotland, as well as of the United States.

For these we are bound to thank the compiler; but he would have had a much stronger claim on the thoughtful portion of the public had he omitted in his walhalla at least a score of persons whom he has rather unceremoniously thrust into company for which neither nature nor education has qualified them. Sometimes it may be profitable, in a certain restricted sense, to attempt to elevate pygmies to the stature of giants, for the former are apt to estimate it at a high figure, even when they are forced to regard it as an utter failure.

It is true that the reader need take no notice of the small fry, but regard their part of the work as so much waste, and it must be admitted, that the remainder is worth the full price of the book. No one receiving for his money the four chapters bearing the following titles, respectively, would have any reason to grumble, viz.: Anecdotes of the Lord Chancellors of England; Ancedotes of celebrated British Barristers; the Chief Justice of the United States; Ancedotes of distinguished Advocates of the

* As an instance see article entitled "Ireland Past and Present," in the "North American Review" for January, 1858.

United States. We do not say that there is no extraneous or irrelevant matter in these; for this would not be correct, but there is quite sufficient of the precious metal to reconcile us to the alloy, the same as we should have no objection to have a little heath and sand thrown in when we buy a fertile farm, that is equally well adapted for tillage and pasturage.

But would it not have been somewhat more proper to have placed the portrait of Webster, Clay, or Marshall, in the post of honour, than that of Salmon P. Chase? We have certainly no dislike to the latter gentleman, but we cannot see why one of the most inferior lawyers or jurists, mentioned in the whole book, should occupy the vestibule of the walhalla with a head, nose, and ears, at least twice as large as those of any of the parties occupying the comparatively obscure inside niches. In our opinion there are many members, both of our bench and bar, who would have made a much more respectable "frontispiece." Lest we might be mistaken in this opinion, we have turned to the sketch of Mr. Chase, beginning at page 128. The most important fact presented to us here is one with which we had already been acquainted, namely, that, having been tired manufacturing greenbacks, he accepted the office of Chief Justice of the United States, which, of course, was a very patriotic act. We are told nothing of those great forensic efforts which one would naturally expect from a person placed in so prominent a position; we have no illustration of his wit or humour, but, apparently, by way of making up for this, we are presented with more than a page descriptive of the supposed wit, or humour—for we cannot tell which—of his *father* ("Squire Chase"); and, with this piece of paternal cleverness, the "notice" of Judge Chase closes.

But now comes the pleasant part of our duty, that of pointing out as fine specimens of intellectual sallies of various kinds as are anywhere to be found. Webster, Clay, Calhoun, and Randolph are presented to us in turn, as well as the great chancellors and famous barristers of England, Ireland, and Scotland, each being allowed to illustrate his own character to a greater or less extent; and in order to see how his favourite jurist, advocate, or orator stands in the new pantheon, the reader has only to turn to a well digested and copious alphabetical index at the end of the volume, which will introduce him much more promptly than we could pretend to do here.

Les Navigations Françaises et la Revolution Maritime du XIVe au XVIe Siècle, d'après les documents inédits tirés de France, d'Angleterre, d'Espagne, et d'Italie. Par PIERRE MARGUY. 12mo, p. 448. Paris: Librairie Tross. 1867.

THIS is a very valuable contribution to the history of maritime discovery on this continent. M. Tross has devoted more attention to this

important department than any other publisher or editor in Europe or America; and, accordingly, we have done ourselves the pleasure, from time to time, of inviting the attention of our readers to several of his publications relative to the discovery, colonization, and colonial history of North America, especially of Canada.

The leading topics treated in the present volume are the history of the earlier French settlers; the ships of Normandy on the coast of Guinea prior to those of Portugal; the Indies in the fifteenth century, and French influence on Christopher Columbus; the voyage of Captain de Gonnaille, and the pretensions of the Normans to the discovery of Australia in the reign of Louis XII.; the road to China, and the pilots of John Ango; hydrography of a discoverer of Canada, and the pilots of Pantagruel, &c., &c.

All these subjects are treated with intelligence and ability, and in that lively, piquant style which is characteristic even of the most thoughtful and laborious French authors. For our own part we have been much interested in the perusal of the work, and had it reached us in time, it would have afforded us pleasure to have reviewed it at length.

The Life of the Rt. Hon. John Philpot Curran. By THOMAS DAVIS, M. R. I. A., *and a Memoir of the Life of the Rt. Hon. Henry Grattan.* By D. O. MADDEN, of the Inner Temple. With Addenda and Letter in reply to Lord Clare. 24mo, pp. 289, Boston: Patrick Donahoe. 1867.

THERE are few books of equal size so interesting and instructive as this, embracing as it does well-written, faithful biographies of two of Ireland's greatest orators and patriots. The names of Grattan and Curran on the title-page constitute a strong recommendation by themselves, not only to the friends of Ireland, but to all admirers of genuine eloquence and stern, unwavering patriotism.

EDUCATION.*

Twenty-third Annual Catalogue of the Officers and Students of the University of Notre Dame, Indiana, for the year 1866–7.

IT is now more than two years since we had the pleasure of visiting this institution. The number of its students had then so much increased

* In our next number we intend to exhibit the true character of certain text-books which are highly eulogized throughout the country by the "drummers" of their manufacturers. In the meantime we would respectfully warn presidents of colleges, principals of academies, &c., against a class of geographies, atlases, grammars, "physiologies," &c., which have multiplied of late.

that it was found necessary to make a large addition to the buildings, and the new structure was nearly completed. In its present finished state, the edifice is one of the most beautiful and best adapted to its purpose of all the educational institutions in this country. Its situation is not surpassed by that of any college or seminary we have met in our travels westward, with, perhaps, the sole exception of St. Mary's Academy, which is conducted by the Sisters of the same Order. The Academy has the advantage of being situated on the banks of the St. Joseph river; but, in every other respect, the two institutions, which are about a mile apart, have every advantage in common which soil, scenery, and facility of access, can afford.

We can assure our readers that we indulge in no exaggeration, but state a simple fact, when we say that St. Mary's Academy, especially, very much surprised us. Had we not seen it with some specimens of its good works, we could hardly have believed that an institution so far to the West, possessed so much genuine talent and superior culture. Certain it is, in a word, that no unprejudiced person could visit the two institutions without feeling that they reflect honour on their founder.

It is now, we believe, a quarter of a century since the Very Rev. E. Sorin, Priest of the Congregation of the Holy Cross, came over from France, with a few Brothers of the same Order; and the following year he commenced to erect the college buildings. To this day the good father has never relaxed his efforts in favour of raising the standard of male and female education in this country. Not only has he superintended both the University and the Academy, for a long series of years, but he has been one of the most zealous and unwearied of the professors in the latter institution; and not content with these various labours, he commenced the publication of a weekly journal entitled "The Ave Maria," in the University, some three years ago, which is now taken to a greater or less extent in every Catholic congregation in the United States, East, as well as West.

That a gentleman of this stamp—one combining superior learning, talent, and Christian zeal—should succeed in establishing a University worthy of the name, even so far westward as Indiana, will not seem strange on reflection. Indeed there is only one other provincial in America—one head of a Christian brotherhood whose mission is to teach—whom we would compare to the Very Rev. Father Sorin. The Rev. W. Corby, President of the University, worthily sustains the efforts of the provincial; and he is aided by a large corps of accomplished professors, including Rev. Fathers and Rev. Brothers.

Catalogue of Rutgers Female College for the year 1867–8. Being the Thirtieth Year of the Institution, and the First of the College. New York, 1867.

THE new Catalogue promises well, and we hope those who issue it will *do* well, for the object which it proposes is a noble one. We fully agree with

the President in his estimate of the importance of female education; and as long as we think he tries to carry into effect the principles by which he professes to be guided, it will afford us pleasure to make known to our readers, from time to time, the progress which he makes. This we can only do from common report and other circumstances in those instances in which the principals of such institutions are in favour of secrecy and averse to criticism; but as we have been politely and cordially invited to visit Rutgers Female College, we shall have an opportunity of seeing for ourselves, and we have no reason to doubt that the result will be satisfactory.

Nor need the students apprehend any disposition on our part to puzzle them with questions; it is our privilege to have visited a goodly number of male and female colleges, agreeably to the wishes of their presidents, chancellors, &c., and we trust we have never been harsh, or inconsiderate, to the students of either. It is no new feature in our journal to devote careful attention to educational institutions; we promised to do so in our first prospectus, issued eight years ago; nor shall we fail to act accordingly as long as we have charge of it. If some institutions have not been pleased with our criticisms and perhaps have *felt* that they ought not, we think there are none acquainted with the facts who would not admit that they should rather have blamed their own incapacity, or negligence. Dr. Pierce seems fully determined to forward the cause of female education; and it is hardly necessary to say that such a determination deserves to be encouraged.

MISCELLANEOUS.

Esquisse du departement musical de l'Exposition universelle, par HENRI DE SIENIRELLE. Brochure, pp. 128. Paris.

WE regret that this little work did not reach us in time, for it contains much that is interesting, especially to the ladies. It not only describes the peculiarities of a large number of musical instruments, but it criticises, in several instances, the awards of the jury. The author is rather jealous of the glory of France, and is somewhat piqued at seeing foreigners carrying off the palm from her children, even in one instance out of twenty. But, as soon as he reaches the section appropriated to pianos, he seems to discard every arrogant feeling, and all at once becomes genial and appreciative. "This, at least," he says, after examining one of the instruments for which Steinway and Sons, of this city, were awarded the first gold medal, "fully deserves the honour conferred on its makers. It is really a wonderful piece of mechanism. M. Melinet is right; it *is* the best instrument in Paris; probably the best in France." (P. 21.)

Nor has he yet given full vent to his enthusiasm, but laying his hand, he says, on the beautiful article, he addresses his fair companion (for such we have a right to assume the lady who accompanied him is) in the language of the opening scene of Voltaire's greatest tragedy:

> "Je ne m'attendais pas, jeune et bell Taire,
> "*Aux nouveaux sentiments que ce lieu vous inspire.*"

Then he passes on to other instruments, foreign and domestic, but has no more praise to bestow in this department; he tells his companion, who agrees with him in every instance, that they had now better pass on to the department of the fine arts. Here he proves that he is a man of superior taste, and then devotes his attention to the specimens of the Catacombs of Rome, sent by Pius IX.

Altogether, the brochure before us is well worthy of perusal; but of no foreign exhibitors in any department is the author so highly complimentary as he is of the Steinways; and we confess that we have called attention to his *Esquisse* the more readily on this account, for we think those gentlemen eminently deserve all the honour that is conferred upon them at home and abroad.

Glimpses of the Spirit Land. Addresses, Sonnets, and other Poems. By Samuel H. Lloyd. Printed for Private Distribution. 8vo, pp. 151. New York, 1867.

There are some very agreeable effusions in this volume. We could mention at least a dozen who consider themselves poets, and have published their productions to the world with considerable flourish, who could not equal many of the *morceaux* thus modestly introduced to his friends by Mr. Lloyd. Indeed, some of the "Glimpses" possess genuine merit. Nor is the "Spirit Land," thus pleasingly described, that of the table-turners or ghost-seers, but a much more poetical and classic region.

Some of the sonnets are really very pretty; the volume also contains some plaintive ballads which many a young lady would like to transfer to her album. We do not feel at liberty to give specimens, as the work has been printed only for private circulation; but we would advise the author to make some additions to the good things, and place them in the hands of the Harpers or Ticknor & Fields.

Prayers of the Ages. Compiled by Caroline S. Whitmarsh. 16mo, pp. 335. Boston: Ticknor & Fields. 1868.

The most liberal and cosmopolitan in his religious views will find sufficient variety in the prayers contained in this volume. We cannot recall a single system of religion, ancient or modern, which is not represented in it. Ancient Greeks, Romans, Hindoos, and Persians, as well as Catholics and Protestants, contribute noble aspirations and appeals to it; although its

Christian prayers are by far the most numerous, and it is needless to add that they are the best.

It is somewhat curious to find those of St. Chrysostom, St. Augustine, St. Bernard, &c., side by side with those of Martin Luther, Theodore Parker, F. Martineau, &c.; not to mention the prayers of Plato, Epictetus, Euripides, Marcus Antonius, and Plutarch. The selection has certainly been well made; indeed, the compiler is entitled to the thanks of every enlightened mind for having furnished such interesting and instructive illustrations of the exalted ideas which the great and noble of all ages and countries have had of the Creator of the Universe.

The Glories of the Virgin Mother and Channel of Divine Grace. From the Latin of St. Bernard. By a Catholic Priest. 24mo, pp. 172. Boston: Patrick Donahoe. 1867.

THE Catholics regard this as one of their Sacred Classics; and we think that the learning, eloquence, and piety with which every page of it is imbued, fully justify them in doing so. We think there is no intelligent Christian, let him belong to what sect he may, who does not revere St. Bernard as one of the noblest, though last in order of time, of the Fathers of the Church; and we have his most eloquent and most famous homilies in this tiny volume, faithfully rendered into excellent English.

INSURANCE.

Insurance Publications, Good, Bad, and Indifferent, for the Quarter ending December 15, 1867.

WE have before us quite a curious pile—every variety of insurance literature, although the crude and thoughtless style greatly predominates in a material point of view. There is, perhaps, a slight diminution in the "plastering" department. In general the eulogies on particular companies are not more than half the usual length; yet most of them have rather an ominous look—they are too suggestive of "white-washing" operations, or of those fainting fits which *eau de Cologne* and certain other liquors are supposed to ward off, for at least a time.

We perceive a large increase in the number of abusive circulars which Insurance companies benevolently issue against each other, lest they might get too proud, or too rich. There are not a few of these which deserve an appropriate corner in Barnum's museum, as specimens of billingsgate, insurance morality, grammar, &c. It is not our intention, however, to enter into particulars in our present number; we do not wish to say disagreeable things, even of the quacks, so near Christmas. We prefer to hope that the prayers of the pious ones during the holidays

may reclaim them, especially as we see that they have recently got some doctors of divinity amongst them who have undertaken to instruct them in the art of beguiling the credulous of their money, in a way that is at once scientific and scriptural.

As an illustration of the good done in this way, we beg leave to refer to a work "exclusively for Agents," entitled "The Agent's Manual of Life Assurance." This is certainly a curiosity; it was presented to us by a Life Insurance President, who is as fond of a joke as he is shrewd and progressive, and opposed to humbug. We cannot now occupy either our time or space with it; but we expect to derive considerable aid from it in interpreting the large pile of annual reports which we shall have to examine at the beginning of the new year. And now that Insurance companies are multiplying as they are—a dozen new ones springing into existence almost every week—a pious guide of this kind, that is sure to tell us the truth—showing that impudence is better than honesty—is indispensable; without it we might run the risk of confounding the underwriter who is worthy of the name, with the quack and the swindler, especially as the latter are often very liberal to their "friends;" and yet it must be confessed that it contains some passages which seem rather equivocal in their design.

Next to the pugilistic exhibitions, to which we may refer more particularly before we close, perhaps the most important event which has taken place in the Insurance world, since our last, is the annual meeting of the Chamber of Life Insurance, which came off in this city at the beginning of November; still we cannot help thinking that its importance was very slight—indeed, scarcely perceptible. This will not be difficult to be understood when it is remembered that the principal speakers, or rather those who did nearly all the talking, were Mr. Morgan, of the North America Life, and Mr. Eadie, of the United States Life, the former gentleman occupying the chair.

Of about a hundred life companies only seventeen were even nominally represented; and of these seventeen the majority were such as the Berkshire Life, Pittsfield; the Northwestern Mutual Life, Milwaukee; the Travelers', Hartford; the Southern Life and Trust, Mobile, &c. The New England Mutual Life is included in the seventeen reported as represented, but its only representative was Mr. Elizur Wright, "consulting actuary," a relation which the same gentleman occupies towards at least a dozen other companies. The President of the New England Mutual permitted himself to be elected President of the Chamber last year, by those who thought they could add to their own importance by inducing a gentleman of his character and influence to accept that position. This year Mr. Stevens is reported "absent." No doubt he was much better employed at home, yet he was unanimously re-elected for the next year. But whether he will often consent to witness the exhibition which the

Messrs. Morgan and Eadie make of themselves, while he can see much smarter buffoons without leaving Boston, remains to be seen.

It is true, indeed, that some three or four of the companies, represented by their principal officers, are highly respectable. We mean the Connecticut Mutual, the National, the Charter Oak, and the Globe Mutual. Dr. Phelps, Mr. E. A. Jones, and Mr. Pliny Freeman, spoke to a greater or less extent, each making some good remarks. But with these exceptions all our principal underwriters preferred to stay at home and mind their own business. We are not sufficiently acquainted with Dr. Phelps to know how far he is to be regarded as an authority. Mr. Freeman we know better, but we think his views, though very honest, are not quite so sound or so *stable* as those of his old colleague of the New York Life, who, like the great American philosopher, his ancestor and namesake thinks that what is everybody's business is nobody's, and that it is better to work at home than to *talk* abroad. In proof of this he sometimes tells his friends that it was not by talk that old Franklin chained the lightning. Still it must be admitted that some very brilliant arguments were adduced at the late meeting of the Chamber; thus, for example, Mr. Eadie proved by our "own poet—*wholly our own, wholly American*," the old story, that

"Truth, crushed to earth, shall rise again," &c.

It is somewhat remarkable that there was no representative from the Knickerbocker, the Equitable, the Mutual Benefit, the Ætna, the Phœnix Mutual, the Manhattan, or the Continental. Perhaps the reason is that the officers of these conceived they had nothing to do with "crushing truth to earth." Doubtless they considered Morgan, Eadie, and Batterson much better acquainted with the process. It has occurred to us that possibly it is ignorance of this kind that is so much deplored in Mr. Eadie's very classical and grammatical report. "Your committee," quoth that important document, "have found, in their correspondence, that a more extended knowledge of life insurance is *greatly needed in some States*," &c. In our opinion there is a slight lack of such knowledge in the State of New York—nay, even in Wall street and Broadway. Nor can we pretend to wonder much at some additional information contained in the same document, such, for instance, as that "legislators *usually well informed upon all the great questions of the day*, view it (Insurance) much in the same light in which the business of *rum-selling is viewed*, as a business to be *severely taxed*, or stringently licensed, *if not absolutely prohibited*."

But why is this? Is it not because there are so many swindlers in the trade?—because there are so many who make great pretensions to integrity and truthfulness whose word is not worth five cents? There are several insurers, three of whom belong to the Chamber, whose word we would not take ourselves for that amount. It is certainly very

hard that honest underwriters should be heavily taxed on account of the conduct of those who are dishonest; but it is so in every business, in every profession. The wisest legislators have often to punish the honest man, in order that the thief may not escape justice. If there were no Insurance companies but such as we have enumerated above among the "absent," then there would be no such restrictive laws in any intelligent State as those complained of in the report of the Chamber; nor should we ourselves have the trouble to put the public on its guard in every number of our journal, as we do, against the sharpers. How can a legislator, or any other intelligent person, entertain a good opinion of *all* Insurance companies, when he sees how many widows and orphans are swindled; how many have to go to law before they can get a penny; how many lose all they have paid for years, in spite of the verdicts of the courts, because the pretended insurers are found, on examination, to have no assets, no property? When, in addition to all this, one company vilifies another, does all in its power to convey the impression that it is unworthy of confidence, in order to draw some additional money to its own coffers; when efforts of this kind are made almost daily, who can blame the legislators for viewing those accusers and vilifiers "in much the same light" as the rum-sellers?

We have an illustration of this now before us in one of the sheets of Batterson & Co., that representing the concern called Railway Passengers' Assurance Company, the title of the organ being "The Passenger." This highly respectable and veracious publication contains nearly two columns of abuse of the Provident Life Insurance and Investment Company of Chicago; the following *morceau* will serve as a specimen:

"The advertising of its capital at One Million of Dollars *is an act of treachery and bad faith* toward the public, which it is very rapidly learning to appreciate. We believe *the india-rubber attributes* of the capital of the Provident are claimed to be possessed by that of no other insurance company in the country. It is expanded or compressed, extended or contracted to suit circumstance or convenience of time and place. Now, with a "slight of hand" operation on the part of the Prestidigitator Holland, it appears at $229,250."*

This is quite respectable compared to the general style of the Batterson & Co. bullies. As to its object, it is sufficient to say that the company thus abused has proved rather a formidable opponent, even in Connecticut, to the Batterson concerns. For our own part we have no personal knowledge of the Provident Life and Investment, but an intelligent Chicago correspondent, in whose veracity we have implicit faith, assures us that there is no company whose policy is more reliable; and his statement is substantially corroborated by nearly all the papers of that city, including the Tribune, Times, Post, Republican, Zeitung, and Banking and Insurance Chronicle. Thus, in the 'Chicago Times' of the 12th inst., we find an editorial in which it is remarked that "none stands

* The Passenger for October.

higher in reputation, or exhibits greater evidences of prosperity than the Provident Life Insurance and Investment Company." The "Milwaukee Daily Wisconsin," whose opinion is quoted by the Times, is still more emphatic in its high estimate of the strength and integrity of the company.

But the Insurance Commissioners of Massachusetts and Connecticut, functionaries by no means infallible at best, have found some fault with the Chicago company for reasons best known to themselves; this afforded a "base of operations" for Batterson & Co., although some of their own characteristic tricks were condemned in the Insurance Reports of New York and Massachusetts, as we have shown in our last number. Although we have introduced the subject merely for illustration, to explain, at least in part, why it is that legislators regard certain insurers as no better than rum-sellers, who must be restricted and heavily taxed, lest they might pound each other's eyes out, we may remark, in passing, that we would rather take the word of the President or Secretary of the Provident for $500 than than of Batterson and his two "Accident" companies for $5; and if any one wishes to know the reason, we think we can satisfy him on that point.

Those who have not seen previous numbers of this journal might perhaps infer, from the above remarks, that we are opposed to any such institution as a Chamber of Life Insurance; far from this being the case, however, we were among the first to advocate the establishment of it. But the moment we saw that Morgan and Eadie were to be its high priests, we predicted its failure; we felt convinced that very few respectable underwriters would consent to become the colleagues of these gentlemen. Nor did we doubt that Mr. Stevens would have begged to be excused, had he known them as well as others. Precisely as we had told our readers, Morgan and Eadie have to lament that "the Chamber is *not* appreciated;" that "some may contrive to stay out as they are now doing;" that "they will not plant themselves upon the firm rock of truth," &c., &c.*

But now the President "stays out;" and we hope he will continue to do so—at least until others take the places of Morgan and Eadie; otherwise those who do not know him, might place the New England Mutual Life in the same category with the North America, the United States, and the two "accidental" Batterson companies.

In order to constitute a Chamber in whose voice the public would have some confidence, the class of officers we would place around Mr. Stevens are Mr. Franklin or Mr. Beers, of the New York Life; Mr. Lyman, of the Knickerbocker; Mr. Alexander or Mr. Hyde, of the Equitable; Mr. Grover, of the Mutual Benefit; Mr. Enders, of the Ætna; Mr. Stokes or Mr. Wemple, of the Manhattan; Mr. Fessenden or Mr. Burns, of the Phœnix Mutual; Mr. Lawrence or Mr. Rogers, of the Continental. We

* Vide reports in Insurance Organs.

would certainly not exclude Messrs. Freeman, Phelps, Jones, and White.* We would only remind them of two nice French fables—one entitled, "Le Lion et le Lionçeau;" the other, "Le Singe et le Léopard"—and request that they read them carefully at their leisure.

Nor must it be supposed that we would have no Accident insurers admitted into the new walhalla; most assuredly we would vote a comfortable seat to Mr. Houpt, or Mr. Darlington of the North American Life and Accident, of Philadelphia, and to Mr. Holland of the much abused Provident Life and Investment; and, from general appearances, we think it would be perfectly safe to give a seat to Mr. Vail, of the Hartford Life and Accident. A Chamber composed of materials of this kind would, beyond all question, exercise a powerful influence, and if its members were still more intelligent and experienced than they are, or could be more honestly disposed, we should consider the veteran President of the New England Mutual Life as eminently qualified to preside over its deliberations.

We would not, however, leave Morgan, Eadie, and Batterson altogether alone. We would send them Dr. Peckham, of the Guardian, to make "purely mutual" pills for them; General Walker, of the Universal, to aid them in manufacturing new "premium tables," when other business is dull; Colonel Curtiss, of the Washington, to lecture on the art of making carpenters, shoemakers, tailors, &c., take pay for their respective commodities in *assurance;* and the Rev. Mr. Dow, of the National Travelers', to show the precise difference between an "accidental" policy and a cash premium. A few more members might easily be added; but even these will constitute nearly as large an audience as that at the late annual meeting.

Several of our fire and marine companies are suffering from atrophy of the heart, frequent fits of syncope, and various other distressing maladies. Some have, indeed, already succumbed; and there are others which it is feared cannot long survive them. It is a singular fact that there was not a single one, either of those recently demised, or those that still continue to suffer on which had not an unconquerable hatred to Quarterly Reviews. The aversion of the Sun Mutual and the Metropolitan had almost become a monomania at the time their *scrip* and other similar "assets" proved to be nothing better than soap bubbles.

The Washington Marine, the Pacific Mutual, and the International have been wont to regard Reviews in the same light; but we are not the less sorry, on this account, that the former has ceased to exist altogether, and that the two latter seem in a very precarious condition. It may be that the removal of Mr. Edwards from the Pacific may enable

* There are two young underwriters—the brothers Halsey—one the Vice-President of the National, the other the Secretary of the Manhattan, to whom we would also most cheerfully give seats, in turn, in the Reformed Chamber, for, although young in years, they are almost veterans in experience and knowledge of Life Insurance—facts which, we believe, are fully appreciated by their respective colleagues.

that institution to eke out its existence a few years longer; but it is to be feared that he remained too long to render this probable.

A sort of *ante-mortem* examination has been held on the International by the stockholders; one result of this has been the retirement of the President and Secretary and of the old board of directors. A Mr. White, one of the new directors (stockholders), is now President, and the gentleman who, among the old officers, was distinguished only for his utter incapacity and imbecility, is Vice-President under the new auspices; that is, the very individual who, in our opinion, was, above all others, the chief cause of the misfortunes of the company, is now retained for its preservation! The late President and Secretary are gentlemen, and men of intelligence; but they were constantly thwarted by one who, if he was incapable of anything better, could at least grumble and whine as well as any old lady we know.

The companies which, upon the other hand, have never evinced any hatred to Quarterly Reviews, or any objection to free discussion, but, on the contrary, have been friendly to both, are, we are glad to say, still able to combat the dangers of sea and land. This is true, for example, of the Mercantile Mutual (Marine), the Security (Fire and Marine), the Washington (Fire and Inland), and we hope they will always continue the faithful and prompt protectors they have ever proved themselves to all who have preferred their policies to those of companies that have been in the habit of making a far greater display of their assets.

As for Philadelphia companies, it is no wonder that they die off nearly as fast as they are "organized," for it is only in rare instances that they possess even ordinary intelligence, not to mention capital or assets. Among the deaths recently announced are the Equitable, the Security, and the Republic; all fire companies. Another Philadelphia concern, called the Protection, is said to be in the last throes. Nor do the life companies of the Quaker City succeed much better; the only one we know to be conducted with intelligence and ability is the North American Life and Accident.

If the companies that are dead or dying had imitated the example of the quiet, unobtrusive Hope (Fire) when they saw that their losses were increasing in an undue ratio, instead of being in their present condition, they would have been better to-day in spite of shipwrecks and fires than they had been for several years—namely, if they had cut off agencies, and confined their labours chiefly to the city of New York. Because the Hope has pursued this honest, judicious course, it is now as safe and strong in its own sphere as companies that boast much larger capitals. The Putnam Fire, of Hartford, is another company that trims its sails with a sharp eye to the barometer, and it manages to keep itself and its policyholders safe accordingly. It does not pretend to be so gigantic or far-reaching as its neighbour the Ætna (Fire) or Ætna (Life), but so far as it undertakes to go its policies are as much respected as those of either of the two great institutions mentioned.

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CONTENTS OF No. XXXI.

DECEMBER, 1867.

I.—Greek Comedy—Menander.

II.—Animal Magnetism; its History, Character, and Tendency.

III.—Management of our Finances; Ruinous Influence of Paper Money.

IV.—Lafayette as a Patriot and Soldier.

V.—Nebular Astronomy,

VI.—Martin Luther and the Old Church.

VII.—Mediæval German Literature—Eschenbach.

VIII.—Heraldry; its Origin and Influence.

IX.—Notices and Critisisms.

AGENTS

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SUBSCRIPTION PRICE $5 A YEAR IN ADVANCE.

Literary Gazette & Post.
Librarian, Hill.

THE NATIONAL QUARTERLY REVIEW.

EDITED BY

EDWARD I. SEARS, LL. D.

VOL. XVI. NO. XXXII. MARCH, 1868.

"Pulchrum est bene facere reipublicæ, etiam bene dicere haud absurdum est."

NEW YORK:
EDWARD I. SEARS, EDITOR AND PROPRIETOR.
61 BROADWAY.

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"I certify that the FIRST GOLD MEDAL for American Pianos has been unanimously awarded to MESSRS. STEINWAY by the Jury of the International Exhibition. First on the List in Class X.

"MILINET, President of International Jury

GEORGES KASTNER,
AMBROISE THOMAS,
ED. HANSLICK,
F. E. GEVAERT,
J. SCHEIDMEYER.
} Members of the International Jury."

This unanimous decision of the International Class Jury, *endorsed* by the Supreme Group Jury, and *affirmed* by the Imperial Commission, being *the final verdict* of the *only tribunal* determining the rank of the awards at the Exposition, places *The Steinway Pianos* at the head of all others, in competition with over **Four Hundred Pianos** entered by the most celebrated European and American manufacturers.

CONTENTS OF NO. XXXII.

ART. PAGE

I. EPICURUS AND HIS PHILOSOPHY 209

1. *Lives and Doctrines of the Illustrious Philosophers.* (Περὶ βίων καὶ δογμάτων τῶν ἐν φιλοσοφίᾳ ευδοκιμησάντων.) DIOGENES LAERT.
2. *De Vita et Moribus Epicuri Commentarius. Libris octo constans.* GASSENDI.
4. *De Natura Deorum. De Finibus. De Fato.* CICERO.
4. *De Rerum Natura.* LUCRETIUS.

II. ENGLISH NEWSPAPERS AND PRINTING IN THE SEVENTEENTH CENTURY 234

1. *Parliamentary Reports and other Public Documents.*
2. *History of British Journalism.* By ALEXANDER ANDREWS.

III. PROGRESS AND INFLUENCE OF SANATORY SCIENCE 257

1. *Report of the Council of Hygiene and Public Health of the Citizens' Association of New York, upon the Sanitary Condition of the City.* Published with an Introductory Statement, by order of the Council of the Citizens' Association.
2. *Second Annual Report of the New York Metropolitan District Board of Health.*
3. *Contributions to Vital Statistics; and a Development of the Rate of Mortality and the Laws of Sickness.* By F. G. NEISON.
4. *Treatise on the Sanitary Management and Utilisation of Sewage.* By WM. MENZIES, Deputy Surveyor of Windsor Forest.
5. *Report of Epidemiological Society.* Published by Parliament.

IV. THE MICROSCOPE AND ITS DISCOVERIES 289

1. *Thoughts on Animalcules; or, a Glimpse of the Invisible World revealed by the Microscope.* By GIDEON ALGERNON MANTELL, LL.D., F.R.S., &c.
2. *A Handbook of the Microscope and Microscopic Objects,* &c., &c. By W. S. NOTCUTT.
3. *Microscopical Researches into the Accordance in the Structure and Growth of Animals and Plants.* By DR. TH. SCHWANN.
4. *Quarterly Journal of Microscopical Science.*
5. *Transactions of the Microscopical Society.*

ART. PAGE
V. THE VENETIAN REPUBLIC AND ITS COUNCIL OF TEN..... 306

1. *History of the Venetian Republic; her Rise, her Greatness, and her Civilization.* By W. CAREW HAZLITT, of the Inner Temple.
2. *Histoire de la République de Venise.* Par P. DARU, de l'Académie Française.
3. *Memorie Venete di* GIOVANNI GALLICIOLI, prete per la nuova Collegione di documenti per scrivire alla storia Veneziana.
4. *Raccolta Cronologico—ragionata di documentii nediti, che formano la storia diplomatica della revolutizione e caduta della Republica di Venezia,* corredata di critiche osservationi.

VI. PROGRESS MADE BY AMERICAN ASTRONOMERS..... 332

1. *On the Nebular Hypothesis.* By DANIEL KIRKWOOD, LL.D., Professor of Mathematics, Indiana State University.—*American Journal of Science and Arts,* for September, 1866.
2. *On the Nebular Hypothesis.* By DAVID TROWBRIDGE, A. M.—*American Journal of Science and Arts,* for November, 1864, and January, 1865.
3. *Introduction to the Mathematical Principles of the Nebular Theory, or Planetology.* By GUSTAVUS HINRICHS, Professor of Physics and Chemistry, Iowa State University.—*American Journal of Science and Arts,* for January, March, and May, 1865.
4. *The Origin of the Stars, and the Causes of their Motions and their Light.* By JACOB ENNIS, Principal of the Scientific and Classical Institute, Philadelphia.

VII. SUPERNATURAL PHENOMENA..... 349

1. *De Occulta Philosophia.* AGRIPPA.
2. *Opera Omnia.* PARACELSUS.
3. *Opera Omnia.* VAN HELMONT.
4. *The Works of Emanuel Swedenborg.*
5. *Odish-magnetische Briefe.* (*Odic Letters,* &c.) VON REICHENBACH.

VIII. IMPEACHMENT OF THE PRESIDENT..... 372

1. *Articles of Impeachment against the President of the United States.*
2. *Speeches in Congress,* &c.

IX. NOTICES AND CRITICISMS..... 382
History and Travels..... 382
Education..... 391
Miscellaneous..... 400
Insurance..... 401

THE

NATIONAL QUARTERLY REVIEW.

No. XXXII.

MARCH, 1868.

ART. I.—1. *Lives and Doctrines of the Illustrious Philosophers.* (*Περὶ βίων καὶ δογμάτων τῶν ἐν φιλοσοφίᾳ ευδοκιμησάντων.*) DIOGENES LAERT.

2. *De Vita et Moribus Epicuri Commentarius. Libris octo constans.* GASSENDI. Leipsic.

3. *De Natura Deorum. De Finibus. De Fato.* CICERO.

4. *De Rerum Natura.* LUCRETIUS.

IN all ages and countries it has been more or less a crime to think boldly, and those who have done so have paid the penalty in one form or other. All founders of sects or systems, philosophical or religious, have been persecuted. If they have not been imprisoned, banished, or put to death, they have at least been traduced and calumniated. Nor have they suffered this treatment only at the hands of the thoughtless multitude; jealousy and envy have not unfrequently arrayed against them the most learned men. Upon the other hand their own partisans or disciples have alike exaggerated their talents and their virtues, so that their true characters can be ascertained by posterity only by communing with the enlightened and dispassionate few who are superior to the prejudices of clique, party, or sect.

Although this is a humiliating commentary on human intelligence, it does not entirely exclude justice. We find, on investigation, that, in proportion as the innovator has more or less error or truth in his system, the persecution or obloquy to which he is subjected is more or less enduring, or otherwise. In general, those who proclaim the truth may

console themselves with the reflection that time will vindicate them to the world, though such is the brevity of human life, it is not likely they will live to enjoy their vindication; but no amount of genius or learning, no length of time, can insure a similar vindication for the champion of error and wrong. All the latter can expect is, that the time will come when he will cease to be accused of more than he has been guilty of; when his virtues, if he has any, will be recognised and placed in the balance against his faults. But it may take ages to render him even this justice.

This is but too true of Epicurus, the subject of our present article. No philosopher of ancient or modern times has been more grossly misrepresented; even at the present day, after the lapse of more than two thousand years, his name is almost synonymous, throughout the world, with vice;* whereas the few unprejudiced, impartial men who have investigated his character in the interest of truth and justice are unanimous in giving him the credit of having lived a most abstemious and blameless life. But that he was an atheist is beyond dispute; and it is still more indisputable that a graver fault no one could be guilty of than to deny the Creator of the universe. He does not, however, forfeit by it the right of being fairly judged; in any case his life and character would be a legitimate subject of study; it would be the duty of the moralist as well as the friend of religion to examine the circumstances or agencies by which he was led into error, the same as it is the duty of the intelligent physician to examine the predisposing causes, and trace the development, even of the most loathsome diseases, in order that the knowledge so acquired might serve at least as a warning to others. Nor will it be denied that, under any circumstances, the founder of one of the most famous sects of philosophers that has ever existed, and the author of three hundred works, would have been an interesting subject of study to the enquiring mind.

According to the most reliable biographers, Epicurus was born in the year 337 B. C., a few years after the death of Plato. Like many other illustrious men, he was the son of poor and humble parents. Diogenes Laertius tells us that

* "Jamais, peut-être," says M. Mallet, "chef d'école ne se vit plus cruellement maltraité que ne le fut Epicure, par les écrivains ses contemporaines, ou par ceux qui vinrent après lui. Cimon le syllographe l'appelle, 'le plus effronté et le plus misérable des hommes.'"—*Etudes philosophiques*, vol. ii, p. 120.

his father, Neocles, was a country schoolmaster,* with but slender pretensions to learning, and that his mother, Chærestrata, practised the arts of magic for a livelihood. The place of the philosopher's birth is disputed, some maintaining that he was a native of the Island of Samos, while others assert, and apparently with more reason, that he was born at Gargettus, within the territory of Athens. Be this as it may, his father was one of the two thousand colonists sent by the Athenian government to Samos in 352 B. C.† Whether Epicurus was born in that famous Island or not, it seems certain that it was there he was brought up. He was ten years of age when he first visited Athens; but he remained only a short time, probably only a few months, having quitted the capital immediately after the death of Alexander. If his father was not learned himself, he valued learning as superior to any inheritance, and so fully did he impress this idea on his son that we are told Epicurus was enthusiastically engaged in the study of philosophy at the age of fourteen years. Such was the young man's aversion to ignorance, which he regarded as a disgrace, that he begged to be excused from attending any of the great schools of Athens until he should have made such progress in his studies as would save him from the ridicule or contempt of the Athenian youth who had enjoyed better advantages than himself. This caused his father to exert himself more and more to secure for him the best instructions within his reach. We are told by Apollodorus that the good man travelled on foot through the Island for several days, until he met with the philosopher Amphilus, a Platonist.‡

His new master offered to teach Epicurus gratis after he had conversed with him for some time in the presence of some of his pupils, although the philosopher was by no means pleased with his doctrines. On being questioned as to the source whence he derived these, he frankly admitted that they were suggested to him by reading the writings of Democritus, a copy of which had fallen into his hands by accident, adding that the impressions which they gave him were strengthened by the perusal of Hesiod's description of chaos. We are told that the disciple of Plato was much pained to find his young pupil an atheist, but that he felt

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* Lib. x., p. 14. †Diog. Laert., ch. ii.
‡ Suid. See, also, Cicero, Natura Deorum, i., 26.

confident he would soon convince him that not only is the universe the work of an all-wise Being, but that the human soul is immortal. When asked why he was so confident of this, the philosopher's reply was, that Epicurus was an excellent reasoner, and that no one who could reason well could persist in maintaining that the universe was the result of chance.*

According to Demetrius, in Diogenes Laertius, when Epicurus had learned all that the best instructors in the Island of Samos could teach, he returned to Athens, and placed himself under the tuition of Xenocrates, who was a disciple of Aristotle, and regarded at this time as the best teacher in all Greece. It seems that he studied under Xenocrates two years; then he went to Mytilene, in the Island of Lesbos, where he opened a school. The people of Mytilene admired his learning and esteemed his character, but detested his doctrines; accordingly, he was obliged to close his school at the end of the year, and remove to Lampsacus, where he was well received—a fact sufficiently proved by his having remained there four years.† At the close of this period he returned again to Athens, and immediately founded his celebrated school, which was known throughout Greece and the Roman Empire for ages afterwards as the Epicurean. It was situated in the midst of a beautiful garden which the philosopher had purchased for a sum equal to about one thousand five hundred dollars—the chief part of what he had earned by his teaching at Lampsacus. He had scarcely opened his school when he was assailed on all sides, but chiefly by the Stoics, who were the Pharisees or Puritans of that age. The charges made against him became more and more serious and malignant in proportion as his pupils increased, especially when it was found that not only had his former pupils followed him from Mytilene and Lampsacus—coming to Athens from all parts of Asia Minor, and even from Egypt‡—but that some of the most eminent of the students of all the other great schools had also sought his instructions. From this forth until his death, which took place in the seventy-second year of his age, there was no species of moral depravity of which he was not persistently accused.

The public easily believed that one who was opposed to all religion must be a bad man; yet we are assured that no

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* Gassendi, lib. i., ch. 7. † Suidas.
‡ Gassendi ex Plutarcho. See, also, Numenius apud Eusebius, l. xiv., c. 5.

other teacher or philosopher had half as many pupils. This is rendered the more remarkable by the fact that he admitted none but those possessed of a certain amount of intelligence; it may well be doubted whether the standard for admission at our best colleges is so high at the present day. Those not up to this standard had to return to their former teachers and learn more. A similar rule was maintained in regard to the public. All desiring to be present at any of the philosopher's lectures had to give some evidence of their ability to form an intelligent opinion of what they heard; and those who could not do so were rigorously excluded. If they forced their way, no lectures were delivered—no students were questioned until the intruders left; whereas, when educated persons entered, they had an opportunity of examining the Epicurean system of teaching in all its branches, no matter what other schools they belonged to. We may remark, in passing, that this is an Epicurean rule from which some modern professors might profit; for certain it is, that there are colleges in our country which are much more willing that the illiterate should be present at their recitations in Greek and Latin than those capable of forming a correct opinion of the character of those recitations. There are many other points of view in which the habits and tastes of Epicurus may be contrasted with those of modern educators, altogether apart from his peculiar system of philosophy. But suffice it to say here, that he had no ambition for the applause of the multitude.

Neither king, nor prince, nor president, could induce him to leave his garden to address the public on any subject whatever. When asked to do anything of the kind his answer was, that it was not to make a display of his knowledge he had devoted his life to it, but in order to communicate it to his pupils, so that it might contribute to their happiness and to his own. It was for the same purpose, not for fame, that he wrote his numerous books. Little as he cared for fame he cared less, if possible, for the calumnies of his enemies; for he only smiled at the grossest libels published against him. He was aware that those whom he addressed daily knew him too well to believe him guilty of any such excesses as those attributed to him; and his pupils and disciples were his world.

Nothing is clearer than that Epicurus was beloved by his school; perhaps no instructor was ever more beloved, not excepting even Pythagoras. But this his enemies ascribed

not to his superior learning, his eloquence, and the gentleness and amiability of his disposition, but to the laxity of his morals. The Stoics proclaimed that he was beloved by his pupils only because he allowed them the freest indulgence in the gratification of their passions; for that he was beloved for some cause was indisputable, since, as Diogenes Laertius tells us, he had so many pupils from all parts of the world that whole cities could not contain them.* But the experience of our own times proves that no teachers are more beloved by their students than clergymen, or those educational brotherhoods who are most strictly moral and pious.

It cannot be denied that his avowed tenets were of a character to render it at least plausible that he had no regard for virtue, and that he considered vice as a good rather than an evil. It was only those to whom he explained himself that knew it was far from his intention to do violence to nature so far as to encourage vice and licentiousness. This we will now proceed to show, for although of all the works of Epicurus none are now extant save a few philosophical letters, a selection of precepts preserved by Diogenes Laertius,† and some fragments of the treatise, *Περὶ φυσεως* (Concerning Nature, 39 books), found in the ruins of Herculaneum, there is no philosopher of antiquity whose doctrines are better known. In the time of Cicero, most of his works, if not the whole, were not only extant, but extensively read. The Roman orator himself speaks of them in several of his philosophical works. We shall see in due time that Cicero severely criticises the tenets of Epicurus, but does justice to the purity of his character as a man. A similar course is pursued by Plutarch, who was as much opposed to atheism as the most pious Christian, but who knew how to distinguish between errors of judgment and the general character of a philosopher.

The Epicurean philosophy is divided into three branches, known as the Canonical, the Physical, and the Ethical; but most critics regard the two former as merely introductory to the latter. It seems highly probable that such was the intention of the author. Be this as it may, the Ethics is by far the most important part of the philosophy. Before passing judgment on Epicurus, or his system, it is necessary to bear in mind that he defines philosophy as *the exercise of reason* with the view of securing a

* L. x., c. 11.

† Diog. x. 35 *et seq.*

happy life. But how is this to be done? Not by the free indulgence of the passions, as the enemies of the philosopher have represented; not by any excesses whatever, but by the acquisition of knowledge, and the dissipation of ignorance.

It will be admitted that even an atheist who makes these the fundamental principles of his system, and insists on their being fully acted upon, cannot do much mischief; for if he offers poison to his followers, he furnishes them a sufficient antidote at the same time. Accordingly, we are informed by most of his biographers, ancient as well as modern, that not one out of twenty of his innumerable pupils accepted from him the atheistic dogma, much as they loved and revered him. The great majority believed that, except in one or two particulars, all his principles were entirely consistent with the existence of a First Cause—a Superior Intelligence, who had not only created the universe, but continued to govern it. It was not, then, as an atheist that Epicurus was the most popular philosopher of his time, but rather in spite of his being an atheist; and still less was he popular as an encourager or prompter of vice; although the contrary in each case is the almost universal opinion entertained of him throughout the world, even to the present day. Now, as well as in the time of the Stoics, a man whose morals are lax, who indulges in sensual excesses without restraint, and who believes neither in religion nor in God, is by general consent called an Epicurean.

What is called the Canon may be regarded as the philosopher's system of logic. His Physics embraces the study of all nature; and he devotes to it the thirty-sixth book of the great work entitled *Περὶ φύσεως*, besides a series of letters, especially those which he addressed to Herodotus and Pythocles. All these the student had to study carefully before he was permitted to form any opinion of the philosopher's Ethics. When he finally took up the latter he was informed that it had a twofold object; to teach what ought to be done and what ought to be avoided. The whole system was embraced in two words—to *choose*, to *reject*. Thus the reason and the judgment are exercised at every step; the student must have a criterion as well as a rule to guide him. After he has learned to make proper use of all these means of investigating truth and dispelling ignorance, he is informed that there are three means of attaining to happiness, namely, *sensations*, *anticipations*, and *sentiments* or *passions*. Sensations are agreeable

or disagreeable, and hence it is that we derive from them, according to Epicurus, our sentiments or passions, which guide us in regard to what we should choose or reject.

But whence do we derive those sensations? In order to answer this question the philosopher has to adopt the hypothesis of Democritus, which teaches that perpetual emissions of subtle images are escaping from all bodies, and by their contact with our sensible organs produce sensation, *αἴσθησις*, accompanied with perception or sensible ideas, *ἐπαίσθημα*, and the understanding completes the logical process.

It need hardly be remarked that this is a very defective logical process, although it is but fair to admit that when it is fully elaborated, as it is by Diogenes Laertius, it seems plausible enough; but even as set forth by the most eloquent Epicureans it is nothing more than plausible. Nor is this strange; had it been otherwise, it would not have led any intelligent mind to believe that the universe is the result of chance. The manner in which this is proved would be logical enough were the premises admitted; but without such admission it is not proof, but the most absurd sophistry. This will be readily seen, in passing, from a brief analysis. Thus, according to Epicurus, the universe consists of two parts, matter and space, or *vacuum* in which matter exists and moves. Now, in this brief sentence, there is much of the secret of the success of Epicurus as a philosopher, showing, as it does, how intimately and attractively he combines truth with error; for the vacuum theory is the accepted one at the present day, having been demonstrated by the researches of Kepler and Newton, who proved the *plenum* theory of Descartes and so many other philosophers to be an impossibility.

Thus a scientific and philosophical truth, taught by Epicurus in his garden towards the close of the fourth century before our era, has been confirmed by the greatest astronomers and philosophers of modern times. There is no reason why this glory should be denied to Epicurus; the cause of truth is in no manner injured by the admission that, however short-sighted and impious the Pagan philosopher was in accounting for the origin of things, his scientific insight was much more piercing than that of Descartes, the most orthodox of Christian philosophers. But, unhappily, whenever Epicurus enunciates a great truth, he is sure to shroud it in error. This is but too apparent in almost every proposition we find in his Ethics. After

declaring the beautiful truth that matter must have space in which to move, he tells us that all matter of every kind and form is reducible into certain indivisible particles which he calls atoms. These atoms he declares to be eternal; but nothing else. According to him there is no such thing as spirit; even the principle of human life, whether we call it soul or mind, is matter, and as such dissolves and perishes.

But let us see how he proves this, and then ask whether there is any danger that it will unsettle the faith of the most weak-minded believer in the existence of an all-wise Creator. He tells us that whatever is animate or inanimate is produced by a fortuitous concourse of these eternal atoms. They have two motions—one perpendicular or straight downwards, the other oblique; and according as they meet while thus in motion, all bodies in the universe, from the sun in the firmament, to the smallest animalcule on earth, including man himself, are formed.

If a mountain differs from an antelope or a nightingale, it is on account of the different kinds of atoms that happened to meet when they came into existence. If maladies attack animals of any species, if a pestilence devastates whole nations, if an earthquake, volcanic eruption, or any other convulsion of nature occurs, all results from a fortuitous concourse of atoms. God has nothing to do with these phenomena, or with any other. Yet Epicurus sometimes speaks of the gods; but it is sufficiently evident that he does so only to avoid the odium which atheism has always inspired, even among Pagans, against men who were regarded as blameless in every other respect.

That Epicurus was a bold man—one who feared nothing—is abundantly proved by the character of his works. At the same time rashness would have violated one of his principal dogmas. One of his favourite precepts was, that we should always avoid wounding the susceptibilities of our neighbours as much as possible, and that even an important truth should not be violently urged on those who were unwilling to receive it. It is highly probable that it was in accordance with this precept he recognised the existence of the gods, and even urged that they ought to be worshipped. For any higher purpose he might as well not have done so, since he denies that they take any part in the government of the world, and that they are either pleased or offended at any thing that happens in it.

He regards them merely as superior beings who deserve reverence and adoration for that superiority, but not for any good they do or can do.

We shall see, presently, that he has been severely criticised for these inconsistencies by competent critics, who had an opportunity of examining his writings. In the mean time we will return for a moment to his Ethics. Now the reader is somewhat better prepared to form an intelligent opinion of the charges made against the philosopher's mode of life and that of his pupils, than when we alluded to that branch of our subject above. We think he will henceforward agree with us that if Epicurus was accused of all sorts of crimes against morality and the welfare of society, it by no means follows that he was guilty of those crimes.

We have already noticed the importance that he attached to pleasure. He tells us that man naturally loves it; and that it is as natural to him to hate pain. Accordingly, he maintains that it is not only allowable that we should seek pleasure and avoid pain, but that it becomes our duty to exert ourselves to the utmost to accomplish those ends, respectively. Nor does he confine himself to any particular kind of pleasure, or pain; he not only includes those of the mind as well as of the body, but ranks mental pleasures and pains much higher than bodily pleasures and pains. In order that there may be no doubt of his real views on this subject, he writes to several of his friends to guard against being misunderstood; and fortunately some of these letters are still extant, having been preserved in the works of Diogenes Laertius. "When we lay down as a principle," says Epicurus in his letter to Meneceus, "that happiness is the end of man, we by no means speak of the pleasures of luxury or of debauchery, as certain men who misunderstand our doctrine, or who interpret it erroneously, allege. Happiness, or the highest pleasure, as we understand it, consists in the health of the body and in the unalterable tranquillity of the soul."*

The question is, whether the free indulgence of the passions would be consistent with the health of the body and the tranquillity of the mind? no moralist or physiologist would maintain that they are. No philosopher has more fully demonstrated than Epicurus himself that excess of any kind is sure to entail its own punishment sooner or later. It has

* Diog. Laert. x.

been generally admitted in all ages that there is no safer guardian of virtue than *prudence*, and no one has held it in higher esteem than the very man who is almost universally regarded as its worst enemy. In order to prove this we need not go beyond the letter already quoted. "The principal of these advantages," he says, "is prudence, the greatest good. Thus the most precious of all things that appertains to philosophy is prudence, whence proceed all the virtues. *There can be no happy life without prudence, probity, justice; virtue is the condition of happiness.*"*

Nor did Epicurus merely preach this doctrine and practise another. All his biographers, ancient and modern, are wrong if his conduct through life was not in strict accordance with it. We have already alluded to his mode of life in his garden, surrounded by his pupils. On account of the misrepresentations constantly made against him by the Stoics, he had an inscription placed over his gate warning all who might desire to enter that they need expect no luxuries there; that the only fare provided was barley cakes and water.† Profiting by the experience of Socrates he refused to get married, in order that he might be able to devote himself to philosophy without interruption. Yet he was accused of having vomited twice a day in order that he might be able to gorge himself the more; and of keeping immodest women for the sensual gratification of himself and his pupils. True, it was only those at a distance who could be induced to believe such stories as these. Every intelligent Athenian, who knew him at all knew that no one lived a more frugal and virtuous life, and that no vicious students were permitted to remain in the garden. Two were expelled on this account; and it was one of these, Timocrates, who chiefly circulated those calumnies against him, partly to avenge himself, and partly to gratify the Stoics. In short, such was his character for chastity as well as frugality in Athens, that one of his worst enemies, Chrysippus, made it a cause of reproach to him by representing that he had no nature in him, being entirely devoid of passions.‡

Although, as already remarked, Cicero has severely criticised the atheistic dogmas of Epicurus, he commemorates the friendship existing between the philosopher and his students in his garden as honourable to human nature.§

*Ib. † Seneca, Ep. 31. ‡ Stob. Serm., 119.

§De qua (amicitia) Epicurus quidem ita dicit, omnium rerum quas ad beate vivendum sapientia comparaverit, nihil esse majus amicitia, nihil uberius, nihil

While the Platonists and other philosophical sects enjoyed their property in common, Epicurus caused each pupil to retain his property, because he thought that the common system implied mutual distrust.

Before proceeding any farther, we will allow Cicero to give his worst impressions of the Epicurean dogmas, in order that the reader may not be unduly prepossessed in favour of the philosopher or his system by any remark made by us, for we have no other interest in the discussion than to make as near an approach as we can to the truth. Cicero being engaged in a discussion with Torquatus the Epicurean, who sought to vindicate his master, exhibits his usual eloquence and sound reasoning; to this it is almost needless to add that no one had more ambition than the great Roman orator to be regarded as the champion of the orthodox faith among his countrymen; for he scarcely ever delivered an oration, either in a court of justice or in the Senate-house, without invoking the immortal gods (*Dii immortales*). "Epicurus says that the sovereign good consists in pleasure," observes Cicero, "and the sovereign evil in pain," for opposite reasons; but the word which answers in his language to that of pleasure in ours, ἡδονή, means among the Greeks as well as among us, the pleasure of the senses; nor has Epicurus himself given it any other signification, since he says, in express terms, that pleasure and pain belong only to the body,* and that the senses are the only judges of it. Is this positive? He says, in express terms, that he cannot even conceive the existence of any good without pleasure; nor can he understand what the Stoics mean by their sovereign good which consists in virtue, and from which pleasure is excluded. He affirms that these are words utterly devoid of sense; he specifies himself as *pleasure*, the agreeable sensations which we receive from the taste, the touch, the sight, the hearing, the smell; and finally he adds what we cannot even mention without offending decency. It is very true that, in other places, as if he blushed himself for his Ethics (so great is the

jucundius. Neque vero hoc oratione solum, *multo magis vita, et moribus* comprobavit. Quod quàm magnum sit, fictæ veterum fabulæ declarant, in quibus tam multis tamque variis ab ultima antiquitate repetitis, tria vix amicorum paria reperiuntur, ut ad Orestem pervenias profectus à Theseo. At vere Epicurus una in domo, et ea quidem angusta, quàm magnos, quantasque amoris conspiratione consentientes *tenuit amicorum greges?* Quod fit etiam nunc ab Epicureis.—*De Finibus*, i., 20.

* We have shown above that this is a mistake on the part of Cicero.

force of natural sentiment),* he says that we cannot live agreeably without living virtuously. But the question with us is not what he says in certain places, but how we can reconcile those places with his entire system; such as it manifests itself everywhere—such as it is understood by the whole world. It is not our fault if he has despised logic, because he knows nothing of it, and understands nothing in definitions. We all define virtue as that which is just and laudable in itself, desirable in itself, independently of all personal interest, of all external praise, of all sensual enjoyment. This is clear, and Epicurus replies "that it is impossible to comprehend what good we see in virtue," &c.†

This is pretty sharp criticism; nor can it be denied that it is just as applied to the tenets of Epicurus; and it is only these that are condemned by the critic. In the same work Cicero gives the philosopher the credit of having been a good man; and many Epicureans, he says, have been, and are at the present day, models of friendship, regular and even severe in their mode of life, governing their actions much more by the dictates of duty, than those of pleasure.‡ What Cicero blames the philosopher for chiefly is for not having made his precepts accord with his conduct, since the latter was exemplary. He says to Torquatus, "You defend that reasoning, and you seek to prove those precepts which are destructive to friendship, although Epicurus has made it worthy of heaven by his own practice of it."§

Cicero does him similar justice in criticising his impiety in denying to the gods the government of the universe; and he is considered in the same light by Seneca, whose views of the Deity, the immortality of the soul, and rewards and punishments, make the nearest approach to those of the early Christian fathers. No critic has presented the doctrine of Epicurus on the universe in a clearer or fairer light than Seneca. "Finally," he says, "O Epicurus, you disarm God; would deprive him of all his weapons, all his power; would

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* Tanta est vis naturæ. † Cic. De Finibus, i.

‡ "Ac mihi quidem, quod et ipse bonus vir fuit, se Multi Epicurei fuerunt, et hodie sunt, et in amicictiis fideles, ex in omni vita constantes et graves, nec voluptate, sed officio, consilia moderantes, hæc videtur major vis honestatis, et minor voluptatis. Ita enim vivunt quidam, ut eorum vita refellatur oratio, atque ut cæteri existimantur; dicere melius quàm facere, sic hi mihi videntur melius facere, quàm dicere."—*De Finibus*, lib. ii.

§ "Ratio ista quam defendis, præcepta quæ robas, funditus evertunt amicitiam, quamvis eam Epicurus, ut facit, in cœlum efferat laudibus. At coluit ipse amicitias, quasi quis illum neget, et bonum virum, et comem, et humanum fuisse. De igenio ejuis in hic disputationibus, nom de moribus quæritur."—*Ib.*

leave him no means of doing either good or evil. Yet you would have him reverenced as a parent. You are grateful, as I think, or you wish to seem grateful, because you derive no benefit from him; but these atoms and other trifles of yours gather about you accidently and rashly. Why then worship him? You say you worship him on account of his majesty, his goodness, his peculiar nature. This I concede to you: you do it in no hope—you are influenced by no reward. But there is a something the dignity of which prompts you to this; it is virtue."*

Thus Seneca gives him the credit of rendering to God a worship which is not mercenary; of taking no account of his own interests, but acting solely on the dictates of reason, which require that we honour whatever is great and perfect. But Seneca also had his doubts as to the sincerity of Epicurus in his views of the gods. He regarded it as highly probable that he was influenced by the fate of Socrates. He admitted, at the same time, that the philosopher had no selfish fear of death, but that he was devotedly attached to his pupils, who always implored him to give the unthinking multitude no excuse to take his life. This is but conjecture, however. All should be judged by what they say and do, not by their motives, since none but God can judge of what passes in the recesses of the heart.

Another excellent judge of character, a moralist and philosopher, vindicates Epicurus on similar grounds; we mean Plutarch, who was as much opposed to his atheism and to his principal moral precepts as the most pious Christian. In a work called the *Banquet* (*Συμπόσιον*), Epicurus has made some remarks on the relations of the sexes, which afforded his enemies a pretext to denounce him as an encourager of licentiousness. It seems that there was no other foundation for the charge than that the philosopher made some observations to his pupils on the question, whether it was better for men to keep company alone with women before or after meals. Be this as it may, Plutarch, who has carefully examined the work, declares that it contains nothing un-

* "Tu denique, Epicure, Deum inermem facis: omnia illi tela, omnem detraxisti potentiam. . . . hunc non habes quare vereatis, nulla illi nec tribuendi nec nocendi materia est. . . . Atqui hunc vis videri colere, non aliter quam parentem: grate, ut opinor, animo, aut si nom vis videri gratus, quia nullum habes illius beneficium, sed te atomi et istæ micæ tuæ forte ac temere conglobaverunt, cur colis? Propter majestatem, inquis, ejus et eximiam, singularemque naturam. Ut concedam tibi: nempe hoc facis nulla spe, nullo precio inductus. Est ergo aliquid per se expetendum, cujus te ipsa dignitas ducit: id est honestum."—*Seneca, De Beneficis*, lib. iv., c. 19.

worthy of a philosopher.* In speaking of the philosopher's atheism the same critic remarks, while condemning Epicurus for his impiety and ingratitude, that, after all, it is better to say that there is no God than to attribute to him the worst of crimes. He would much rather, he adds, have it said that there was no Plutarch than that Plutarch was a tyrant, a thief, an adulterer, &c. It is almost needless to remark that the comparison was made in allusion to the gods and goddesses of Greek and Roman mythology, who were constantly committing excesses of one kind or another. In other words, Plutarch thought that those who believed in deities, such as Jupiter, Juno, Venus, Mercury, and Apollo were represented in his time, were as impious as Epicurus, who, if he believed in God at all, deprived him of all power either to reward the good or punish the wicked. In illustration of this, he reminds his readers of such orthodox stories as the theft of Apollo's cows by Mercury, &c.

But no vindication of Epicurus, as a philosopher or a man, could prevent his false teachings, in regard to the Creator, from doing mischief. We may believe those good men who assure us that he did much more good than harm in his own time. But when his views were given to the world at second hand the results were different. It is no exaggeration to say that some of his disciples have done more mischief to mankind than those of any other philosopher, ancient or modern. This is true, for example, of Lucretius, who, in his great poem, *De Rerum Natura*, exaggerates every feature of the Epicurean philosophy. All other works together do not treat the subject more fully than this; not one of the numerous pupils who lived with Epicurus in his garden had a more enthusiastic admiration for him than Lucretius. Thus the Roman poet may be called the Boswell of the Greek philosopher; but the Roman is vastly more eloquent and more sublime, as well as more learned, than the Scotchman. There is not one of the Epicurean dogmas, or precepts, to which we have alluded in this paper, which is not elaborately discussed by Lucretius; and certain it is that no writer has ever made more powerful and ingenious use of sophistry in poetry or prose. No one has reasoned so profoundly on such false premises; by the extraordinary powers of his logic he has excited the admiration of the most pious Christians. Although Cardinal Polignac wrote his *Anti-Lucretius*

* Plutarch's Table Talk, iii.

to refute his atheistic arguments, he could not help being charmed by his genius. The poem of the Christian prelate is undoubtedly a fine production; but it is as much inferior to that of the Epicurean poet, in grandeur and sublimity, as the hawthorn is to the oak. Nevertheless the Cardinal has fully refuted Lucretius; but, unhappily, for one who has read the *Anti-Lucretius*, five hundred have read *De Rerum Natura*. And the comparatively few who read the former have been by no means so much charmed as the many who have read the latter; at the same time it cannot be denied that Polignac has done much good by such fine verses as the following:

"Si virtutis eras avidus, rectique bonique
Tam sitiens, quid religio tibi sancta nocebat?
Aspera quippé nimis visa est. Asperima certè
Gaudenti vitiis, sed non virtutis amanti.
Ergo perfugium culpâ, solisque benignus
Perjuris ac fœdifragis, Epicure, parabas," &c.*

In every part of his poem Lucretius evinces the most enthusiastic admiration for Epicurus; from him he derives inspiration, as the lover does from his mistress; as the one regards his mistress as perfect, so does the other regard his master. First, Epicurus is recommended to the gratitude of mankind because he first raised his voice against the terrors of religion. "When the life of men," he says, "lay foully grovelling before our eyes, crushed beneath the weight of Religion, who displayed her head from the regions of the sky, lowering over mortals with terrible aspect, a man of Greece was the first that dared to raise mortal eyes against her, and the first to make a stand against her. Him neither tales of gods nor thunderbolts, nor Heaven itself, with its threatening roar, repressed, but roused the more the active energy of his soul, so that he should desire to be the first to break the close bars of nature's portals. Accordingly, the vivid force of his intellect prevailed, and proceeded far beyond the flaming battlements of the world, and in mind and thought traversed the whole immensity of space; hence triumphant, he declares to us what can arise into being and what cannot; in fine, in what way the powers of all things are limited, and a deeply fixed boundary assigned to

* If virtue, justice, goodness, were thy care,
Why didst thou tremble at holy religion's call?—
Whose laws are harsh to vicious minds alone,
Not to the spirit that delights in virtue, &c.

each. By which means Religion, *brought down under our feet is bruised in turn; and his victory sets us on a level with Heaven.*"*

This passage would be quite sufficient to show by itself the spirit in which Lucretius writes; he avows that it is as an enemy of Religion and of God he admires and reveres Epicurus; and every passage in the whole poem is in strict accordance with this feeling. The third book of the poem opens with a still more enthusiastic eulogy on Epicurus, in which the poet informs us that he adopts the doctrines of the philosopher: "O thou, who from so great darkness wast first able to raise so effulgent a light, shedding a lustre on the blessings of life, thee, O glory of the Greek nation, I follow, and now place the steps of my feet formed upon thy impressed traces, yet not because I am so eager to rival, as because from the love which I feel for thee, I desire to imitate thee. For why should the swallow contend with swans? Or what, that is all similar, can kids, with trembling limbs, and the strong vigour of the horse, perform in the race? *Thou, O Father, art the discover of truths; thou suppliest to us paternal precepts, and from thy writings*, O illustrious teacher, as bees gather from the blossoms in the flowery glades, so we feed upon *thy golden words;* golden I say, and most worthy of perpetual existence. For as soon as thy system of philosophy began to proclaim aloud the nature of things, as it arose, by thy divine intellect the terrors of the mind disperse; the walls of the world open; I see things conducted throughout the mighty void of space; the calm divinity of the gods appears, and their tranquil abodes, which neither winds disturb nor clouds sprinkle with showers," &c., &c.†

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* "Primum Graius homo mortalis tollere contra
Est oculos ausus primusque obsistere contra,
Quem neque fama deum nec fulmina nec minitanti
Murmure compressit cælum, sed eo magis acrem
Inritat animi virtutem, effringere ut arta
Naturæ primus portarum claustra cupiret.
Ergo vivida vis animi pervicit et extra
Processit longe flammantia mœnia mundi
Atque omne immensum peragravit mente animoque,
Unde refert nobis victor quid possit oriri,
Quid nequeat, finita potestas demique cuique
Quanam sit ratione atque alte terminus hærens.
Quare religio pedibus subiecta vicissim
Opteritur, nos exæquat victoria cælo."
—*De Rerum Natura*, lib. 1, p. 66, *et seq.*

† "E tenebris tantis tam clarum extollere lumen
Qui primus potuisti inlustrans commoda vitæ,
Te sequor, o Graiæ gentis decus, inque tuis nunc
Ficta pedum pono pressis vestigia signis,
Non ita certandi cupidus quam propter amorem
Quod te imitari aveo; quid enim contendat hirundo

This shows that Lucretius was well acquainted with the writings of Epicurus; and since the poet was undoubtedly one of the most learned men of his time, as well as a genius of the first order, it might well be inferred from his praise, even were it not corroborated, as it is, by that of so many other illustrious thinkers, that Epicurus was no trifler, no debauchee, no inebriate, no sensualist. A person of this character could not have elicited such praise from such men, no matter how highly gifted he had been, for we know from personal observation, as well as from history, that an excessive indulgence of the passions soon enfeebles the most powerful and brilliant intellect. The surfeits alone which Epicurus is accused of having taken at table, would have disqualified him for the duties of even an ordinary teacher. Gluttons do not think, write, and teach as he did; still less could habitual drunkards do so. As already remarked, the cause of truth or religion does not require that even an atheist and the enemy of all religion should be calumniated.

Lucretius regards him not only as the greatest of all benefactors of mankind, but as a god; "who," he says, "has such power over words that he can compose eulogies proportionate to the merits of him who has left us such blessings obtained and acquired by his own intellect. No one, as I think, formed of a mortal body, would ever be able. For if we ought to speak as the known dignity of the subject which he expounded requires, he was a god, a god I say. O illustrious Memmius, who first discovered that discipline of life which is now called wisdom! For compare with his investigations the ancient discoveries of others which are called divine. For which reason, he from whom the sweet consolations of existence was spread already through mighty nations, calm the minds of men, seems to us the more justly to be accounted a god."*

Cycnis, aut quid nam tremulis facere artubus hædi
Consimile in cursu possint et fortis equi vis?
Tu, pater, es rerum inventor, tu patria nobis
Suppeditas præcepta, tuisque ex, inclute, chartis,
Floriferis ut apes in saltibus omnia libant,
Omnia nos itidem depascimur aurea dicta,
Aurea, perpetua semper dignissima vita."

—*De Rerum Natura*, lib. iii. 1-13.

* "Quis potis est dignum polleuti pectore carmen
Condere pro rerum majestate hisque repertis?
Quisve valet verbis tantum qui fingere laudes
Pro meritis cuis possit qui tatia nobis
Pectore parta suo quæsitaque præmia liquit?
Nemo, ut opinor, erit mortali corpore cretus."

—*Ib.*, lib. v. 1-8.

The poet opens his sixth book with a eulogy on Athens, for what her illustrious men have done for science and arts, but chiefly for what Epicurus has done. "Athens, moreover," he says, "first afforded sweet consolations of existence when she gave birth to that *pre-eminent* man, endowed *with such mighty genius*, who once poured forth instruction on all subjects from his truth-speaking mouth, and whose fame spread abroad of old on account of his discoveries, is raised, *since his death*, even to the skies." Since Epicurus was thus beloved and admired by a Roman nearly three centuries after his death, it is not strange that he was idolized by the pupils with whom he conversed daily, and to whom he read all his writings before they were made public.

But we have learned more from Lucretius than his admiration of his master; indeed he makes us familiar with every argument which Epicurus was in the habit of adducing in favour of his various doctrines. He had no views on the universe or its origin, on religion or morality, which are not fully exhibited in this poem. We have already seen what the opinion of master and disciple is of the gods. It is doubted whether Lucretius more than Epicurus believed in the existence of any eternal beings, although one as well as the other speaks of them freely; but both deny that they created the world, or can exercise any control over it, whether to serve or injure it. Upon the other hand, both have taught that the whole universe is perishable. The argument of Lucretius is, that the world had a beginning, and therefore must have an end. Nearly the whole of the fifth book is devoted to a proof of this. The poet undertakes to prove, in turn, how the sea, the earth, the sun, &c., must necessarily cease to exist; and never were error and impiety presented in a more fascinating garb. "Nor does it escape my consideration," he says, "how new and wonderful a subject it is for your reflection that there will be an end to the heaven and the earth, and how difficult it is for me to convince you of this with arguments; as it generally happens, indeed, when you offer to the ear a subject hitherto strange to it, and yet cannot submit to the sight of the eye, or put it it in the hand, the avenues through which the nearest main road of belief leads into the human breast, and the regions of the mind."*

We need not proceed any farther in this direction to show the influence of Epicurus on some of the greatest minds of antiquity; although we have been able to do little more than

* De Rerum Natura. Lib. v, 98 *et seq.*

allude to that influence. We may remark here, in general terms, that not only had Epicurus more pupils in his school than any other philosopher; he had also incomparably more disciples after his death who were philosophers. Among the latter may be mentioned Timocrates and his brother, Athænus, Leonteus, Zeno of Sidon, Demetrius Lacus, Diogenes of Tarsus, Polystratus; the two Ptolemys were his disciples, so were Colotes and Idomeneus, Heliodorus of Stratonica, and Hemarchus of Mytilene. It must be borne in mind that there have been a large number of illustrious thinkers, who, without openly avowing the Epicurean doctrines and predilections were still followers of Epicurus. Among these may be mentioned both Horace and Virgil, Cæsar and Sallust; and notwithstanding the criticisms of Cicero, which we have quoted above, most of his biographers are of opinion that the great orator was an Epicurean, at least, in his ideas of pleasure and pain. Even Horace, who was less scrupulous in his morality than almost any of his illustrious contemporaries, avoids giving any encouragement to the Epicurean doctrines; nowhere does he commendingly speak of either Epicurus or his great eulogist and disciple, Lucretius. But this did not arise from any want of esteem on his part for one or the other; indeed, nothing is more certain than that he admired each, and especially the master. But at this time the Epicurean doctrines had been so much abused by bad, vicious men, who called themselves the disciples of Epicurus, that the whole system had fallen into disrepute. In short, the term Epicurean had become one of reproach throughout the world. That the Fathers of the Church should have denounced a system which had thus degenerated into a school of vice and impiety, is no evidence of their being either bigoted or intolerant, as alleged by the enemies of virtue and religion. They simply did their duty as moralists and Christian ministers. Had they pursued any other course, or made any compromise with the pretended disciples of Epicurus, their efforts to establish Christianity would have been fruitless, and all Europe might have been in a more deplorable state to day, morally and religiously, than that of Rome, which called forth the satires of Horace, Juvenal, and Persius.

But the influence of Epicurus and Lucretius was too powerful to be entirely crushed in a thousand, or even two thousand years. There is not one of our modern atheists who has not drawn his chief arguments against the Cre-

ator of the universe from the Epicurean philosophy. If the reader will examine the works of all, he will see how little they contain that is original; and, in nine cases out of ten, this little consists of an exaggeration of the doctrines of Epicurus. Even Descartes had the physical system of the illustrious Greek before his mind when he promulgated the apothegm, "*Donnez-moi la matière et le mouvement, et je construirai le monde.*" The same matter and motion, be it remembered, were the chief gods of Epicurus; according to him it is they that had formed the universe and every being that inhabits it. In his physics, Descartes makes nature too independent of the Deity; whereas, in his metaphysics, he makes God and nature nearly one; and his *plenum* had the effect of rendering his system still more confused. Thus it was that he left room for the two systems of Spinoza and Malebranche—one regarding all things as God, the other regarding God as all. It does not seem that Descartes had any better reason for maintaining that "nature abhors a *vacuum*," than that Epicurus had taught thousands of years before him that a vacuum was essential to motion, a doctrine which, as already intimated, has received the sanction of Copernicus, Newton, Kepler, and Galileo. Be this as it may, it is beyond dispute that Descartes, as well as Spinoza and Malebranche, has been influenced by Epicurus.

Still more directly has Baron d'Halback been influenced by the Greek philosopher. But the latter was not so learned, neither was he possessed of so much genius as either Spinoza or Malebranche, although a much more fascinating writer; and the consequence is that he greatly exaggerates those Epicurean doctrines already exaggerated to a considerable extent by the calmer and more thoughtful genius of Lucretius. Hence it is that of all books written in ancient or modern times, d'Halback's "System of Nature" is the most atheistical. While there is some doubt as to the atheism of all other writers known as atheists, not excepting Epicurus, Lucretius, and Spinoza, all doubt is removed by d'Halback; so that he might be distinguished in this, if in nothing else, from the Greek atheist. In proof of the fact, we need only quote a few remarks from the "System of Nature." "It is contended," says d'Halback, "that animals furnish us with a convincing evidence that there is some powerful cause of their existence; the admirable adaptation of their different parts mutually receiving and conferring

aid towards accomplishing their functions and maintaining in health and vigour the entire being, announce to us an Artificer uniting power and wisdom. Of the power of nature it is impossible for us to doubt; she produces all the animals that we see *by the help of combinations of matter which is in incessant action;* the adaptation of the parts of these animals is the result of the *necessary laws of their nature* and of their combination. When the adaptation ceases, the animal is necessarily destroyed. What then becomes of the wisdom, the intelligence, or the goodness of the alleged cause to which was ascribed all the honour of this boasted adaptation."* If this be compared with the passages we have quoted from Lucretius, it will be seen that the ideas of the ancient and the modern are identical; the only difference between them consists in the language in which those ideas are clothed. D'Halback differs somewhat from his master, however, as he proceeds, but only, as we have said, in being more barefacedly atheistic. Thus, for example, nowhere has Epicurus or Lucretius used such language as the following: "Where are the wisdom, the goodness, the foresight, the immutability of an artificer whose sole object appears to be to derange and destroy the springs of those machines which are proclaimed to be masterpieces of his power and skill? If this God can act no otherwise than thus, he is neither free nor omnipotent. If his will changes he is not immutable. If he permit machines which he has endowed with sensibility to experience pain, he is deficient in goodness. If he has been unable to render his productions solid and durable, he is deficient in skill. Perceiving, as we do, the decay and ruin, not only of all *animals, but of all works of deity*, we cannot but inevitably conclude that everything performed in the course of nature, is *absolutely necessary*—the unavoidable result of its imperative and insuperable laws, or that the artificer who impels her various operations, is destitute of plan, of power, of constancy, of skill, and of goodness."†

We have no apprehension that any of our readers will have less faith in the Creator of the universe, or less admiration for his works, on account of any of the atheistic arguments which we have thus glanced at, otherwise we should not have noticed them. They only show that no genius is so profound, or great, but that in some particulars he may

* Système de la Nature, partie II, chap. v, p. 153. † Ib., p. 157 *et seq.*

err even more than the most thoughtless; for it is given to none to know all things. No system of cosmology is more easily refuted than that of Epicurus.

We call it his, although it had previously been taught by Leucippus and Democritus, because it was his superior genius that brought it into notice. Thus Epicurus is a borrower, or, as some call him, a plagiarist, but he is so only in the sense in which Shakespeare and Milton are borrowers, or plagiarists, for it is well known that both our great poets availed themselves of what others, vastly inferior to themselves, had previously thought and written. Certainly, there was as great a difference between the works of Epicurus and Democritus, or Leucippus, as there is between those of Milton and the old Anglo-Saxon poet, Cædmon, or between the works of Shakespeare and those of the other poets from whom he has borrowed so largely; yet neither Milton nor Shakespeare can be regarded as a plagiarist, since each has vastly improved what he has borrowed, incorporating it with the creations of his own genius, from which it derives additional lustre. And it is as an author and philosopher, not as a teacher of religion, we are bound to consider Epicurus; and if we render him this justice, we shall see that, after all, he was no worse, even in a religious point of view, than Hesiod, Homer, or Virgil, each of whom has attributed to the gods the grossest excesses—nay even the most atrocious crimes.

Nor is their mode of accounting for the origin of the universe much better than that of Epicurus; and if they recognise in it the agency of the gods, it is only in a manner that is much better calculated to turn them into ridicule than to inspire us with feelings of veneration or reverence. Yet the works of Homer, Hesiod, and Virgil are not only permitted by the most pious Christians to be read, but also to be used as text-books in schools and colleges wherever literature is cultivated. Nor is it to be doubted that, if the works of Epicurus had survived the ravages of time, they would also have been used as text-books. Surely one who devoted his life to study, research, and investigation—who was always willing to communicate his knowledge as fast as he acquired it, and who laid it down as a fundamental principle that before making any pretensions to philosophy it was necessary to dissipate ignorance, and that even pleasure, ἡδονή, was to be obtained only by the calm exercise of reason—surely a philosopher who acted through life on these precepts, must

have infused into his works a refining and elevating spirit in spite of his atheistic dogmas. As to the latter, they are so contradictory in themselves that they scarcely need to be refuted; we may say, at least, that our readers need no refutation of them. It may not be entirely superfluous, however, to make a few additional observations on the subject before we close.

The basis of the Epicurean system is most briefly and clearly defined by his disciple Lucretius, by the precept that nothing comes from nothing, and that nothing can return to nothing:

"Ex nihilo nihil, in nihilum nil posse reverti."

Yet, according to his system, everything is produced from nothing, except matter, which, he maintains, existed of itself from all eternity. As all things proceed from matter and motion, it is necessary that the latter should also be eternal; otherwise it would have required an intelligent cause to give it origin; and accordingly Epicurus declares it eternal. Assume that the atoms have been in motion from all eternity, then it follows that, by their fortuitous meeting or concourse, everything in the universe has been produced. But in order to render this feasible, it has been necessary to give those atoms two motions—one downwards, in a perpendicular line, the other in a line somewhat inclined from the perpendicular. Now, Epicurus himself admits that space is infinite; and there is no precept more universally recognised among philosophers and scientific men that there is nothing more unphilosophical than to suppose either a downward or upward motion in infinite space. Motion may be said to be upward or downward in relation to the earth, the sun, any of the primary planets, or the fixed stars; but it is evident that the motion that would be downward in relation to one should be upward in relation to another; and be it remembered that if Epicurus is right, not only is the earth itself the result of this fortuitous concourse of atoms, but also the sun, the planets, the fixed stars, the comets, &c.

He admits that there is no cause for the declination of the atoms; but maintains it is necessary that it should take place. Without it no beings could be produced; therefore, all produced by its means are produced from nothing—that is, without any adequate cause, which is impossible, according to the philosopher's own reasoning. Again, if nothing can be produced from nothing—in other words, if nothing exists or has existed without a cause, what is the cause of motion?

What gave it its origin? If nothing did, then something—nay, the greatest of all things and of all beings—comes from nothing!

But supposing it is admitted that all things have been produced by this fortuitous concourse of atoms, how is it that, so far as history tells us, no new beings have been produced for many centuries? If animals, plants, or minerals were produced by chance, three or ten thousand years ago, why are not some produced now by the same means? How is it that no organic being is produced any longer without a germ?

It is admitted by Epicurus that atoms have no intelligence, although Democritus had endowed them with animation; how is it, then, that they can adapt the organs of the various species of animals to their respective modes of life, the sort of food they are destined to live on, &c.? Since those atoms are in perpetual motion and acting on each other only according to chance, why do they not destroy to-day what they produced yesterday?

The Epicureans admit that the organs of all animals are well suited for their purposes, but they deny that they were designed to be so. None of our organs, they say, were made for the uses we make of them, but having, by chance, found them useful for certain purposes, we use them accordingly; that is, if we are to believe Epicurus and Lucretius, our eyes were not made to see, our ears to hear, our feet to walk, or our stomachs to digest; but we use them respectively for those purposes, because we have discovered accidentally that they are useful for them. The dog's nose was not made to smell, but he has discovered that it is useful for that purpose. Of course the same is true in regard to his heart, lungs, veins, and arteries; all were made by the fortuitous concourse of atoms. But the dog has found, also by chance, that the heart is useful for receiving the blood from the veins, and for propelling it through the arteries, after it has been duly purified by the lungs, and he turns each to account accordingly! So much, then, for the manner in which Epicurus and his followers have sought to dispense with the Creator of the Universe. Now, is not the atom theory as illogical and absurd as it is impious? What could be more superfluous than an elaborate refutation of such a theory?

Nor was it left to any Christian writer to perform any such work. The Pagans themselves had abundantly refuted Epicurus. Cicero had fully exposed the absurdities of his cos-

mogony before any of the Fathers of the Church wrote on the subject. He told the Epicureans that it would have been much less dishonourable for their master to have made no reply to those who contradicted his atheistic doctrines, than to have had recourse to such arguments as those by which he has sought to establish his atom theory, by way of showing that the universe needed no Creator, and had no Creator.*

Notwithstanding the absurdity of the cosmology of Epicurus, it is certain, as already remarked, that he has done much harm; but we think it equally certain that he has done more good; and if we are right in this, he is entitled to be ranked among the benefactors of mankind. Before this is agreed to, however, it must be borne in mind that perfection is not the lot of man. That all-wise Being, whose creative power and government of the world Epicurus has denied, has so ordered it that the greatest faults are often combined with the greatest merits, or the noblest gifts. So great was the learning of Epicurus; so heartily did he devote himself through a long life to the development of the human mind; so zealously did he labour not only to cultivate the arts and sciences on account of their own beauty and attractiveness, but also to render them subservient to the uses and happiness of man; and so well did he succeed in those laudable efforts that he would have been deemed a god himself by all his contemporaries, as well as by his students and disciples, had he not obscured all his merits by his impious denial of the Creator of the universe.

ART. II.—1. *Parliamentary Reports, and other Public Documents.* London.

2. *History of British Journalism.* By ALEXANDER ANDREWS. London, 1859.

IN the early part of the seventeenth century the majority of the books published were embellished with numerous woodcuts, and the printers were thus enabled to please the

* "Hoc persæpe facitis, ut cùm aliquid non verisimile dicatis, et effugere reprehensionem velitis, afferatis aliquid, quod omnino ne fieri quidem possit: ut satius fuerit illud ipsum de quo ambigebatur, concedere, quàm tam impudenter resistere: velut Epicurus cùm videret, si atomi ferrentur in locum inferiorem suopte pondere, nihil fore in nostra potestate, quod esset earum motus certus et necessarius, invenit quo modo necessitatem effugeret, quod videlicet Democritum fugerat: ait Atomum, cùm pondere, et gravitate directâ deorsum feratur, declinare paululùm. Hoc dicere turpius est, quàm illud quod vult, non posse defendere."—*Cicero. De Natura Deorum*, lib. i., p. 96.

public, and, at the same time, remunerate themselves, The printing of religious works had led to the printing of other books, especially the ancient classics, and as but a few understood the learned languages, the attraction of woodcuts caused them to be studied more. Taking off the impression of the cuts was executed by the typographical process, and consequently there was no separate expense after the original cost of drawing and engraving. As the original readers, however—principally nobles, rich citizens, and scholars by profession—began to desire something more expensive than woodcuts, copper-plates were introduced into works of all kinds. The impressions from these being obtained by an entirely different process, the prices of books were accordingly raised to cover the additional expense to which the printers were subjected.

The printing-press in the seventeenth century was a rude one. It consisted of a common screw press, somewhat resembling a cheese-press, with a simple contrivance for running the form of types under the screw, after the form was properly inked. As the table, which contained the types, was solid and unyielding, the printers were compelled to exercise the greatest care in preventing the heavy pressure from injuring the face of the letters. The types were inked by hand. Two circular cushions, afterwards called "balls," were employed for this purpose, and the printer was obliged to make his own balls. The sheepskins were prepared in the printing-office, where the wool with which they were stuffed was also carded. The quantity of ink wasted was enormous. These balls remained in use up to the beginning of the present century.

In the year 1500, learned men were employed as correctors of the press to distinguished printers. Bishops, priests, lawyers, and physicians occupied this department, and as the printers added to their names those of the correctors of the press, the editions were valued according to the talents of the corrector. In the seventeenth century, the printers held gain in more esteem than glory, and began to display a want of forethought in the selection of their correctors. The compositors were comfortably seated on cushioned stools, and had the privilege of wearing a sword and dirk; a recognition that men of birth and education were accustomed to practise this branch of printing.

The ink was decidedly bad. This is plainly shown by the fact that the ink in the English records, from the fifth to the twelfth centuries, is of a better colour than in those from

the fifteenth to the end of the seventeenth. There is a want of legibility in the latter, whilst the former remain as perfect as they were on the day when they were first written. The ink of the twelfth century had not the same properties, except colour and gum. In the seventeenth century, gall-nuts, copperas, and gum formed the component parts of ink, whereas, at an earlier age, soot and ivory-black were the chief ingredients.

James I., who ascended the English throne in 1603, seems to have possessed a real love of letters, but his writings are of so inferior a character that, had he been anything less than a king, he would never have been raised into notice. The period, extending from his ascension to the throne to the revolution in 1688, was an unfavourable one for the diffusion of knowledge. There was so much pedantry in the court of the Stuarts, and so much controversy among the subjects on matters of church and state, as left them but little time to cultivate their understandings. The press was principally employed in publishing works of a political nature.

In 1612, the city of London, having some time before had the Province of Ulster granted to it by the king for a plantation, the corporation sent thither about three hundred persons "of all sorts of handycrafts-men," chiefly to inhabit the cities of Londonderry and Colerain. It is almost an impossibility to obtain any correct data relative to printing in Ireland, but, probably, a few printers were included among the "handycrafts-men" sent by the city of London.*

* It would have been no wonder had Ireland neither printers nor books at this time, since it was a crime, punishable with transportation, and even death, from the time of Henry VIII. to be a schoolmaster among the "mere Irish." Those Irish who wished to educate their children had to send them to France or Italy for that purpose; and then when they returned they were regarded with suspicion as persons who knew too much, and persecuted accordingly. This is the barbarous code which Edmund Burke proclaimed to the world, "had a vicious perfection. It was a complete system," he says, "full of coherence and consistency; well digested and well disposed in all its parts—well fitted for the oppression and degradation of a people, and the debasement in them of human nature itself, as ever proceeded from the perverted ingenuity of man." Yet Ireland had had printers before London sent those "handycraftsmen." More than half a century previously (1550) Humphrey Powell printed "the Liturgy and several books of poetry." We have no record at hand of the art in that country of an earlier date. But John Ereginus had flourished many centuries earlier—801-807—had written his *De Divisione Naturæ*, and many other learned works, and occupied an important position in the brilliant court of Charles the Bald of France. "On ne saurait comprendre cet homme véritablement extraordinaire," says M. Hareau, "sans admettre qu'il existait alors en Irland, à l'extrême limite de l'ancien monde, une colonie *des philosophes* chez lequels s'était maintenue, à-peu-près intacte *durant l'invasion barbare*, la tradition, *ailleurs complétement effacé de la dernière école grecque, l'école d' Alexandria.*"—*Nouv. Biog. Générale*, t. xvi., p. 258.

The "English Mercurie," published during the reign of Queen Elizabeth, was the first genuine newspaper printed in England.* The earliest number in the British Museum, marked fifty, and dated July 23d, 1588, contains an account of a visit of the Scotch ambassador to her majesty. On the occasion he "delivered a letter from the king, his master, containing the most cordial assurances of adhering to her majesty's interests, and to those of the Protestant religion." From 1588, up to and including the reign of James I., 1603 to 1625, packets of news, in the shape of small quarto pamphlets, were occasionally issued. They bore the names of the different countries to which they referred, such as "Newes from Italy, Hungary," &c., and were universally believed to be translated from the Low Dutch. They were eagerly sought after by the people, and Robert Burton, in his "Anatomie of Melancholie," which appeared in 1621, complains that "if any one read now-a-days, it is a play-book, or a pamphlet of newes." During the thirty years' war, when the victories of Gustavus Adolphus had excited public curiosity, these occasional pamphlets were converted into a regular weekly paper, entitled "The Certain Newes of this Present Week." This publication, which may be regarded as the first journal of the kind in England, was printed by Nathaniel Butler, in 1622. There is also an account of "The London Weekly Courant," in the books of that year, but this is, probably, the same paper.

From 1623 to 1664, only two editions of Shakespeare's plays, amounting to one thousand copies, were published, which shows that the people had no great partiality for this illustrious poet.

Licensers of the press were first established by Charles I., in 1625. This gave rise to a new class of publishers, who were known as the editors of "unlawful and unlicensed books." Sparkes, publisher of Prynne's "Histriomastix," was one of this class of unlawful printers. In parliament, the Presbyterian party, who were thus deprived of the organs of the press, cried out aloud for its freedom from restraint, but, on coming into power themselves, they

* Nearly two centuries previously the Venetians had regular newspapers, which they called *gazettas*. The first newspaper ever seen in England was one brought to the court of Henry VIII. by the Venetian ambassador, whose countrymen were undoubtedly the first that issued that highly useful class of publications; although we are often told at the present day that the "broad sheet" is one of the many great things we owe to the inventive genius of our Anglo-Saxon ancestors!

maintained the office of licenser of the press with extreme rigour.

In the early part of the reign of Charles I. the people were more desirous to learn what was passing abroad than at home, and Lord Clarendon informs us that "no man ever enquired what was doing in Scotland, nor had that kingdom a place or mention in one page of any gazette."

The paper of the period was mostly imported from rance, for, although the first paper mill was erected by a German, at Dartford, in 1538, it was not until 1713 that Thomas Watkins brought paper-making to perfection. On June 18, 1626, Charles I. levied "customs and imposts upon all such merchandises as were imported and exported," for the purpose of carrying on the war with Spain, which had been begun by his father, James I. This, however, having proved to be too slow a method of raising money, a general loan was resolved upon, and commissioners were appointed for that purpose. The assessment of the loan met with much opposition, and George Abbot, Archbishop of Canterbury, having refused to license a book in behalf of the loan, was suspended for a time from his archepiscopal jurisdiction.

In 1626, "The Mercurius Britannicus," a continuation of Butler's "Newes of this Present Week," made its first appearance. This was succeeded by the "German Intelligencer," in 1630, and the "Swedish Intelligencer," in 1631. The latter, which was compiled by William Watts, of Caius College, was a quarto pamphlet, and contained the exploits of Gustavus Adolphus. The English printers, from Caxton to John Day, who, in 1567, published a book of antiquities, combined printing and letter-founding. After this, the trades began to be separated; for, by a decree of the Star Chamber, in 1637, it was ordered that "there shall be four founders of letters for the kingdom, and no more." From 1640 to 1660 upwards of thirty thousand volumes of tracts were published. The long parliament was the first that published periodical appeals to the people, with an account of their proceedings. The earliest of them, called "Diurnal Occurrences of Parliament," appeared on November 3, 1641. The "London Gazette" was first printed on the 22d of August, 1642. Copies of the earlier numbers of this paper are now very scarce.

During the Civil Wars of Cromwell, periodical papers, by disseminating among the people sentiments of royalty

or rebellion, began to acquire that political importance which they have ever since retained. Large numbers of "Diurnals" and "Mercuries" were issued, and in the year 1643, when the war was being carried on with renewed spirit by the Cavaliers and Round-heads, nearly a score are said to have been started. Among the papers printed in this year may be mentioned "The Kingdom's Intelligencer," "England's Memorable Accidents," "The Diurnal of Certain Passages in Parliament," "The Mercurius Aulicus," "The Scotch Intelligencer," "The Parliament's Scout," "The Parliament's Scout's Discovery; or, Certain Information," "The Mercurius Civicus; or, London's Intelligencer," "The Country's Complaint, &c.," "The Weekly Account," and the "Mercurius Britanicus."

Peter Heylin, a clerical adherent of Charles I., and one of the staunchest defenders of civil and ecclesiastical tyranny, in the preface to his "Cosmography," mentions that the affairs of each town or war were better presented in the weekly news-books. Thus, we find papers entitled "News from Hull;" "Truths from York;" "Warranted Tidings from Ireland," &c. As the people, however, became more and more interested in the contest, papers began to be published two or three times in the course of a week. Among these were, "The French Inteligencer;" "The Dutch Spy;" "The Irish Mercury;" "The Scots' Dove;" opposed to "The Parliament Kite," and "The Secret Owl." Humourous papers were also published in weekly numbers, such as "Mercurius Acheronticus; or, News from Hell;" "Mercurius Democritus," containing an account of what was transpiring in the moon; and "The Laughing Mercury," with perfect news from the antipodes. As the strife waged hotter and hotter, the titles of the papers became keener and keener. "Heraclitus Ridens" found a severe antagonist in "Democritus Ridens," and "The Weekly Discoverer" was, soon after its publication, vanquished by "The Weekly Discoverer Stripped Naked." "Mercurius Britannicus" was also grappled by "Mercurius Mastix," faithfully lashing all Scouts, Mercuries, Posts, Spies, and other intelligencers. Mercury was the prevailing title of these "news-books." They were devoted principally to political purposes, and, by serving as the receptacles of party-malice, soon became a public nuisance. They were the faggots which kept alive the smouldering ashes of civil discord. A vast number of these papers were issued during the war,

and so great an acquisition was the press considered at that time, that each of the rival armies carried along with it a moveable printing office.

The publication of parliamentary proceedings was continued to the restoration of Charles II. in 1660. They partook of the nature of our modern magazines, and were generally called "Mercuries," as "Mercurius Politicus," "Mercurius Rusticus," &c., and one of them, in 1644, appears under the strange title of "Mercurius Fumigosus; or The Smoking Nocturnal." On the 14th of June, 1645, the battle of Naseby, fought by the Cavaliers under Charles I., and the Round-heads, under Fairfax, ended in the entire rout of the king's army and the seizure of all his artillery and ammunition. Among the spoil was the king's letters, which the parliament afterwards published. These letters do not give us a very high idea of the king's genius and morals. On the contrary, they make it manifest that he contemplated deception whilst professing good faith, and that he did not possess the attributes of common honesty or any ability.

The office of licenser of the press lay dormant a short time under Cromwell. Mabot was a conscientious licenser, and desired the Council of State, in 1649, for certain and specific reasons, to be discharged from active duty in this department of public affairs. The probability is that Milton's "Areopagitica; or, Speech for the Liberty of Unlicensed Printing to the Parliament of England," had led him to adopt this course of conduct.

The first "newes-book" published in Scotland was issued by the commander of Cromwell's forces at Leith, who ordered the attendant printer to furnish impressions of a London diurnal, for the instruction and amusement of his men. Its title was "Mercurius Politicus," and the Scotch reprint made its first appearance on the 26th of October, 1653. In November, 1654, the establishment was transferred to Edinburgh, where the reprinting of newspapers was continued until April 11th, 1660. In a London weekly newspaper, entitled a "Perfect Account of the Daily Intelligence, 16—23, November, 1653," we find the following advertisement in reference to a lottery:

"ADVERTISEMENT.

"At the Committee for Claims for Lands in Ireland—Ordered, That a Lottery be at Grocers-Hall, London, on Thursday 15 Decem. 1653, both for Provinces and Counties, to begin at 8 of the clock in the fore noon of the same day; and all persons concerned therein are to take notice thereof.

"W. TIBBS."

This lottery, which took place during the commonwealth, appears to have escaped the observation of those who take delight in hunting up accounts of such adventures. The "Perfect Picture of State Affairs," a London paper, published on the 26th of July, 1656, contains the following:

ADVERTISEMENT.

"There is an Office for generall accommodation of all people, newly erected and kept at the house of Edward Soolly, Gentleman, Scituate in Basinghall street, near Blackwell-hall, London. There are several registers there kept, where such persons may enter their names, and desire, that shall at any time have occasion in any of the particulars following, viz. Such as have a desire to Mortgage or sell any Land or Houses, or to let to farm any Land by Lease or yearly Rent in any part of England, or such as desire to be boarded by the year or otherwise, or to take lodgings in, or Country Houses neer the City of London. Or such as shall at any time want able and fit Soliciters to follow any businesse, and likewise such as shall want either men Servants, Apprentisses, Clerks, or others, or Maid Servants, or Nurses for children. There are likewise registers kept to enter the names and places of aboad of all such as shall desire to buy Land or houses, or to let out money upon Mortgage, or to take to farm any Land, or to take Countrey Houses about the City, or Lodgings in the City, or to take any to board; and likewise for all Servants that shall at any time want a Service, and make their desires known at the said Office. By which means people may easily come to the knowledge one of the other, and their several necessities and occasions be speedily supplied.——And likewise all Ministers' Widdows, and others, that have Studies of Books to sell at second hand, may at the said Office give in a Catalogue of their Books, and such as want any Books scarce to be come by, may upon their repair to the said Office view the said Catalogues, and very probably know where to be supplyed."

Let us take a glance now at the newspaper-writers during the period of the Commonwealth. Marchmont Needham, a man of versatile talents, was the editor of the "Mercurius Britannicus," "wherein he endeavoured to sacrifice the fame of some lord, or any person of quality, or of the king himself to the beast with many heads." Captain Needham of Gray's Inn, as he was generally called, at first sounded his trumpet in favour of Cromwell, but having been imprisoned for aspersing Charles I., he requested an audience with the king, and, being pardoned, became an ultra-royalist. He wrote the "Mercurius Pragmatticus," in which he sneered at the Round-heads. He was finally won over by President Bradshaw and galled the royalists in his "Mercurius Politicus." On the Restoration of Charles II. he escaped into Holland, where he waited for an act of general oblivion. Needham obtained pardon, under the great seal, for having given money to a hungry courtier. Becom-

ing a physician in later life, he practised among the adherents of the Presbyterian party, but was universally hated by the royalists. Sir John Birkenhead was the editor of the "Mercurius Aulicus," a paper published at Oxford, and devoted to the advancement of the king's interests. He was a keen wit and bitter satirist, and wrote numerous political pamphlets. He was imprisoned several times by order of parliament, and, after his release, made his living principally by writing poems for lovers, and translating. After the Restoration, Charles II. appointed him one of the masters of requests with a salary of three hundred pounds a year, but he showed his baseness by neglecting those who had been his friends in adversity.

The third and last writer of any note during this period was Roger L'Estrange. He was regarded as a model for all political writers to follow. After the Revolution, Queen Mary displayed her contempt for him by this anagram:

"Roger L'Estrange,
Lie strange Roger."

On June 6th, 1660, shortly after the Revolution, an act was passed to enable the soldiers of the Commonwealth, after disbanding, to exercise trade in any corporation, in order that they might be in a position to live honestly. Probably, many of them recognised the fact that the pen is mightier than the sword, and laying aside their warlike habits, devoted themselves to the cultivation of the noble art of printing. In 1660, the office of licenser of the press was revived, and in the same year, also, the proceedings of parliament were interdicted to be published, unless by authority. From 1661 to 1668, no less than seventy "newes-books" were published under various titles, and almost all of them were of a sarcastic description. For example, we have the "Mercurius Meretrix;" "Mercurius Radamanthus;" *Public occurrences, truly stated, with allowance! News from the Land of Chivalry, being the pleasant and delectable History and Wonderful and Strange Adventures of Don Rogero de Strangmento, Knight of the Squeaking Fiddlestick*, &c.

The first regular newspaper, in the present form, was the "Public Intelligencer," published by Sir Roger L'Estrange, August 31, 1661. In January, 1661, the "Mercurius Caledonius," the first regular paper in Scotland, was established. The ten numbers which were published, contain an account of the extravagant feeling of joy resulting from the Restora-

tion, together with a great deal that must be set down as anything but clever and amusing. For example, "March 1, 1661. A report from London of a new gallows, the supporters to be of stones, and beautified with statues of the three Grand Traitors, Cromwell, Bradshaw, and Ireton." And again—"As our old laws are renewed, so likewise are our good, honest customs; for nobility in the streets are known by brave retinues of their relations; when, during the captivity (the commonwealth), a lord was scarcely to be distinguished from a commoner. Nay, the old hospitality returns; for that laudable custom of suppers, which was covenanted out with raisins and roasted cheese, is again in fashion; and where before a peevish nurse would have been seen tripping up stairs and down stairs with a posset for the lord or lady, you shall now see sturdy jackmen groaning with the weight of sirloins of beef, and chargers loaden with wild fowl and capon."

After the Restoration, the newspapers contained a greater variety of interesting topics, and the contests between the rival editors became, as it were, a thing of the past. "The Kingdom's Intelligencer," published in London, 1662, contained more information than any of the former "newes-books." Notices of the proceedings of parliament and the law-courts, were to be found in its columns, and Deaths for the first time became a speciality. It also contained some curious advertisements, such as:—"The Faculties' Office for granting licenses (by act of parliament) to eat flesh in any part of England, is still kept at St. Paul's Chain, near St. Paul's churchyard." And, again, "There is stolen abroad a most false and imperfect copy of a poem, called *Hudibras*, without name either of printer or bookseller, as fitting so lame and spurious an impression. The true and perfect edition, printed by the author's original, is sold by Richard Marriot, under St. Dunstan's church in Fleet Street; that other nameless impression is a cheat, and will but abuse the buyer as well as the author, whose poem deserves to have fallen into better hands."

At this early age the publication of parliamentary speeches met with much opposition, and on the 9th of July, 1662, a warm debate occurred in the Irish parliament, concerning the publication of its proceedings, in an English newspaper, called "The Intelligencer." The Irish speaker, in consequence, wrote to Sir Edward Nicholls, the English Secretary of State, to prevent such publication in those "diurnals."

The manufacture of paper was not much encouraged in England at this time, and Thomas Fuller, a writer of the period, states that "Paper participates in some sort of the character of the country which makes it; the Venetian being neat, subtile, and court-like; the French, light, slight, and slender; the Dutch, thick, corpulent, and gross, sucking up the ink with the sponginess thereof." It is stated in "Bagford's Collections,"* that in August, 1663, Roger L'Estrange, as surveyor of the imprimery and printing-presses, had the "sole license and grant of printing and publishing all ballads, plays, &c., not previously printed, play-bills, &c." These privileges he sold to operative printers, but it is not known at what precise time his license ceased. It is a well-known fact, however, that monopolies of all kinds were granted to court favourites, in the reign of the licentious Charles II. This same Roger L'Estrange, in 1663, edited "The Intelligencer, published for the Satisfaction and Information of the People." He continued to issue this journal until 1665, and espoused with great warmth the cause of the crown on all occasions. In the "Newes" of May 18th, 1664, we find the following:

"NOTICE.

"His sacred majesty having declared it to be his royal will and purpose to continue the healing of his people during the month of May, and then give over till Michaelmas next, I am commanded to give notice thereof, that the people may not come up to the town in the interim, and lose their labour."

Evelyn, speaking of the first touching for evil by Charles II., on July 6, 1660, says that "his majesty, sitting under his state in the banquetting-house, the chirurgeons cause the sick to be brought or led up to the throne, where they kneeling, his majesty strokes their faces, or cheekes, with both his hands at once, at which instant a chaplaine in his formalities says 'he put his hands upon them and he healed them.' This is sayd to every one in particular. When they have been all touched they come up again in the same order, and the other chaplaine kneeling, and having an angel-gold (piece of money so called) strung on white ribbon on his arme, delivers them one by one to his majesty, who puts them about the necks of the touched as they pass, while the first chaplaine repeats 'that is the true light, who came into the world.' Then follows an epistle (as at first a gospel),

* Harl. MSS., No. 5910, vol. ii.

with the liturgy, prayers for the sick, with some alteration, lastly the blessing; then the lord chamberlaine and comptroller of the household bring a basin, ewer, and towell for his majesty to wash." This so-called miraculous power is said to have been first exercised by Edward the Confessor.

The first "Gazette" in England made its appearance on the 7th of November, 1665. It was at first called the "Oxford Gazette," owing to the earlier numbers being issued at Oxford, where the court was then holding and parliament sitting, in consequence of the plague in London. On the removal of the court to London, this same paper was issued on February 5, 1666, under the title of the "London Gazette." Originally, the word gazette meant a newspaper, or a printed account of the transactions in all countries, in a loose sheet, or half-sheet. Now, however, it is applied to a paper of news published by authority. The term is derived from gazetta, a small coin formerly current in Venice, which was the usual price of the first newspaper printed there.

In a paper entitled "The Case and Proposals of the Free Journeymen Printers in and about London," dated October 23d, 1666, it appears that the number of working printers who had served a regular apprenticeship, then resident in and about London, was no more than 140. There were some "foreigners," also—that is, workmen who had not obtained their freedom by serving a regular apprenticeship. Their number, however, was not very large, and this paper is a remonstrance against any such persons being employed. In 1666, the people began to read again and think. At the fire in London, which occurred in this year, the booksellers around St. Paul's lost two hundred thousand pounds' worth of books which were stored there, and in the neighbouring churches. From 1666 to 1689 there was published three thousand five hundred and fifty books, two-fifths of which were professional works.

Lotteries were drawn at the theatres, during the reign of Charles II. Books were held out as a lure to adventurers, by way of lottery, for the benefit of the suffering loyalists. In the "Gazette" of May 18, 1668, is the following advertisement: "Mr. Ogilby's lottery of books opens on Monday the 25th instant, at the old Theatre between Lincoln's-inn-fields and Vere street; where all persons may repair on Monday, May 18, and see the volumes, and put in their money." In the same paper of May 25th, it is announced that "Mr. Ogilby's lottery of books (adven-

turers coming in so fast that they cannot in so short time be methodically registered) opens not till Tuesday, the 2d of June; then not failing to draw; at the old Theatre between Lincoln's-inn-fields and Vere street." Mr. Ogilby was the author of these useful, though now useless "Itinerarium Angliæ; or, Books of Roads." In April, 1669, the "Gazette" states that Charles II., the Duke of York (afterwards James II.), and many of the nobility were present "at the grand plate lottery, which, by his majesty's command, was then opened at the sign of the Mermaid over against the mews." The same paper, a few days afterwards, contains the following: "This is to give notice, that any persons who are desirous to farm any of the counties within the kingdom of England or dominion of Wales, in order to the settling up of a plate lottery, or any other lottery whatsoever, may repair to the lottery office, at Mr. Philips' house, in Mermaid-court over against the mews; where they may contract with the trustees commissioned by his majesty's letters patent for the management of the same patent, on the behalf of the truly loyal, indigent officers."

By an act of the 14th of Charles II. (1674), the number of founders of letters for the kingdom was again restrained to four, and the number of printers was limited to twenty. This act, however, was only provisional, and appears to have never been carried into effect. The demand for knowledge was so general that four founders and twenty printers were inadequate to the supply. Printing type was imported from Holland until some time after the death of Queen Anne.

In 1678, the year of the so-called "popish plot," several newspapers were published, such as "The Weekly Visions of the Popish Plot," "Discovery of the Mystery of Iniquity," &c. In 1679, "The True Domestic Intelligence" had a large circulation among the people, and is said to have contained matters of unusual interest to the public. On the 12th of May, 1680, Roger L'Estrange, who had started a second paper, called "The Observator," exercised his authority as licenser of the press, by issuing "a proclamation for suppressing the printing and publishing unlicensed newsbooks and pamphlets of news, because it has become a common practice for evil-disposed persons to vend to his majesty's people all the idle and malicious reports that they could collect or invent, contrary to law; the continuance whereof would in a short time endanger the peace of the kingdom, the same manifestly tending thereto, as has been declared

by all his majesty's subjects unanimously." The publication of parliamentary proceedings must have been prohibited shortly after the application of the Irish Speaker in 1662; for it appears that a debate arose in the House of Commons, on March 24, 1681, in consequence of which the votes of that body were first printed by authority of parliament. In the year 1682, a specimen of newspaper orthography is found in "The True Protestant Mercury. No. 162":

"ADVERTISEMENT.

"Lost, a flowered silk *Manto* (mantua) Gown, of a sable and Gold Coulor, lined with Black, between *Arnisted Clers* (St. Agnes le Clair) and the White Houses at *Hogsden* (Hoxton) on Wednesday last, the 19th instant, about 4 or 5 *a* clock in the Afternoon. Any one that can give Intelligence of the said Manto Gown to Mr. Blewit's, at the Rose and Crown, in *Loathberry*, shall have 10*s*. for their pains."

In the "London Gazette" of April 13, 1682, we find the following notice: "Whereas Mr. John Clarke, of London, did rent of Charles Killigrew, Esq., the licensing of all ballad-singers for five years; which time is expired at Lady-day next. These are, therefore, to give notice to all ballad-singers that they take out licenses at the office of the revels, at Whitehall, for singing and selling of ballads and small books, according to an ancient custom. And all persons concerned are hereby desired to take notice of, and to suppress all mountebanks, rope-dancers, prize-players, ballad-singers, and such as make show of motions and strange sights (puppet and peep-shows), that have not a license in red and black letters, under the hand and seal of the said Charles Killigrew, Esq., master of the revels to his majesty." And in particular it requires them to suppress two, one of them being "Thomas Teats, mountebank," who have no license, "that they may be proceeded against according to law." Pepys, in his diary, February 13, 1667–8, states that "Killigrew hath a fee out of the wardrobe for cap and bells, under the title of the king's fool or jester; and may revile or jeer anybody, the greatest person, without offence, by the privilege of his place." The office of Master of the Revels was created under Henry VIII., in 1546.

Advertisements, as now published, were not general in England until the beginning of the eighteenth century. The charge for inserting advertisements (then untaxed) we learn from the "Jockey's Intelligencer," 1683, to be "a shilling for a horse or coach, for notification, and sixpence for renewing." In the "Observator Reformed," of the same

year, it is announced that advertisements of *eight lines* are inserted for one shilling. In the "London Gazette" of October 1, 1683, we find the following: "These are to give notice that the jewels of his late royal highness Prince Rupert, have been particularly valued and appraised by Mr. Isaac Legouch, Mr. Christopher Rosse, and Mr. Richard Beauvoir, jewellers, the whole amounting to twenty thousand pounds, and will be sold by way of lottery, each lot to be five pounds. The biggest prize will be a great pearl necklace, valued at 8,000*l.*, and none less than 100*l.* A printed particular of the said appraisement, with their divisions into lots, will be delivered gratis, by Mr. Francis Child, at Templebar, London, into whose hands such as are willing to be adventurers are desired to pay their money, on or before the first day of November next. As soon as the whole sum is paid in, a short day will be appointed (which, it is hoped, will be before Christmas) and notified in the 'Gazette,' for the drawing thereof, which will be done in his majesty's presence, who is pleased to declare, that *he himself will see all the prizes put in amongst the blanks*, and that the whole will be managed with equity and fairness, nothing being intended but the sale of the said jewels at a moderate value. And it is further notified, for the satisfaction of all as shall be adventurers, that the said Mr. Child shall and will stand obliged to each of them for their several adventures. And that each adventurer shall receive their money back if the said lottery be not drawn and finished before the first day of February next." In the "Gazette" of a later date, we read that "the king will probably, to-morrow, in the Banquetting-house, see all the blanks told over, that they may not exceed their number, and that the papers on which the prizes are to be written shall be rolled up in his presence; and that a child, appointed either by his majesty or the adventurers, shall draw the prizes."

On February 6th, 1685, King Charles II. died, at the age of 54, and was succeeded by his brother, James II. During the reign of the latter, the licensers of the press exercised almost unlimited authority, and the imprimateur, "Let it be printed," was much used at this time. In Morphew's "Country Gentleman's Courant," a newspaper published in 1685, is a notice from the editor, wherein he states that, "seeing promotion of trade is a matter that ought to be encouraged, the price of advertisements is *advanced* to 2*d.* per line."

Joseph Moxon, a mathematical instrument maker, and also a letter-cutter by trade, in his work, published in 1686, states that the number of founders and printers had grown so great, that "the operators had found it necessary to divide it into the several trades of the master-printer, the letter-cutter, the letter-caster, the letter-dresser, the compositor, the corrector, the press-man, the ink-maker, besides several other trades which they take into their assistance, as the smith, the joiner, &c." This division in labor indicates that the art of printing was then making rapid progress towards perfection. Letter-cutting at that time was an art which was only known to those who had served a regular apprenticeship in that particular branch.

On the 21st of May, 1685, James II. issued an order to the Stationers' Company, through the censor of the press, Sir Roger L'Estrange, in which, after adverting to the scandalous and intolerable licentiousness of the press, he declared to be his royal command:

1. "That all books of and concerning the common laws of the realm are to be licensed by the lord chancellor, the lord keeper of the great seal of England, the lord chief-justices, chief baron, or one or more of them, or by their or one or more of their appointments.

2. "That all books of history, and books concerning the state of the realm, or other books concerning any affairs of state or history whatsoever, are to be licensed by his majesty's principal secretaries of state, for the time being, or one of them, or by their or one of their appointments.

3. "That all books concerning heraldry, titles of honour and arms, or otherwise concerning the office of earl-marshal, are to be licensed by the earl-marshal for the time being, or by one of his appointment.

4. "That all books of divinity, physic, philosophy, arts, and sciences, be licensed and allowed by the archbishop of Canterbury, the bishop of London for the time being, or by one or more of their appointments, or by either of the chancellors or vice-chancellors of the universities for the time being; the said chancellors and vice-chancellors, however, only having the power to license such books as are to be imprinted or reprinted within the limits of the said universities respectively, but not in London or elsewhere.

5. "That with respect to such miscellaneous books and papers as shall not properly fall under any of the above, they be subjected to the censure of the surveyor of the press for the time being, or such of his deputies as shall by him, the said surveyor, be thereunto authorized and appointed."

The Stationers' Company were commanded to see this order strictly carried into effect, and to take especial care that no book should be entered or published at their hall without such license being first obtained.

In the "London Gazette" of May 17, 1688, we find that, besides the lottery at the Vere-street theatre, "Ogilby, the

better to carry on his *Britannia*, had a lottery of books at Garraway's Coffee-house, in 'Change Alley."

On the 13th of February, 1688, the Prince and Princess of Orange were declared King and Queen of England. In Randel Holme's "Storehouse of Armory," published in 1668, is the following account of the printer's May festival:

"STATIONERS' HALL MAY FEAST.

"The Printers, Journeymen, with the Founders and Ink-makers, have every year a general Feast, which is kept in the Stationers' Hall on or about May Day. It is made by the 4 Stewards, 2 Masters, and 2 Journeymen; and with the Collection of half a Crown a piece of every Guest, the charges of the whole Feast is defrayed.

"About 10 of the Clock in the Morning on the Feast day, the Company invited meet at the place appointed, and from thence go to some Church thereabouts in this following order. First 4 Whifflers (this originally meant 'fifers' or 'pipers,' but in process of time the term was applied to those who went before a procession), by two and two, walking before with white Staves in their Hands, and red and blew Ribbons hung Beltwise upon their Shoulders; these make way for the Company. Then walks the Beadle of the Company of Stationers, with the Companies Staff in his Hand, and Ribbons as afore.

"Then the Minister, whom the Stewards have engaged to Preach the Sermon, and his Reader or Clerk.

"Then the Stewards walk, by two and two, with long white wands in their Hands, and all the rest of the Company follow in like order, till they enter the Church, &c. Service ended, and a Sermon suitable for the occasion finished, they all return to their Hall in the same order, where upon their entrance each Guest delivers his Ticket to a person appointed, which gives him admittance; where every one feasts himself with what he likes best, being delighted all the while with Musick, and Songs, &c.

"After Dinner the Ceremony of Electing new Stewards for the next Year begins: then the Stewards withdraw into another Room, and put Garlands of Laurel or Box on their Heads, and white wands in their Hands, and are Ushered out of the withdrawing Room thus:—

"First, the Companies Beadle with his Staff in his Hand, and Musick sounding before him; Then one of the Whifflers with a great Bowl of White wine and Sugar in his right Hand, and his Staff in the left: after him follows the eldest Steward.

"Then another Whiffler as aforesaid, before the second Steward; in like manner another Whiffler before the third; and another before the fourth Steward.

"And thus they walk with Musick sounding before them, three times round the Hall; and, in the fourth round, the first Steward takes the Bowl from his Whiffler, and Drinks to one (whom before he resolved on) by the title of *Mr. Steward Elect;* and taking the Garland off his own Head, puts it on the Steward Elect's Head, at which all the Company clap their Hands in token of Joy. Then the present Steward takes out the Steward Elect, and Walks with him, hand in hand, (giving him the right Hand,) behind the three other Stewards, another round the Hall; and in the next round as aforesaid, the second Steward drinks to another with the same Ceremony as the first did; and so the third, and so the fourth. And then all walk one round more, hand in hand, about the Hall, that the Company may take Notice of the Stewards Elect: and so ends the Ceremony of the Day."

On April 11, 1689, the Prince of Orange and his wife the Princess Mary, daughter of James II., were crowned at London and filled the throne of her exiled father, who was thus utterly cashiered and excluded. After the Revolution, the business of printing rapidly increased, by reason of the demands for sheets of intelligence or news, as well as for a better class of literary productions. The first daily paper took the popular title of "The Orange Intelligencer." Sir John Harrington's translation of "Orlando Furioso," printed in 1690, was the first English work in which copper-plates were used. From this time the use of wood-cuts declined in England.

The paper of the seventeenth century was made of rags, as it is at the present day. Before the Revolution, there was hardly any other paper made in England than brown; but the war with France ensuing, and duties being laid from time to time on foreign paper, the English manufacturers in 1690 began to make white paper fit for writing and printing. It is said that this improvement upon their former manufactures produced a saving to England of one hundred thousand pounds annually, which had been paid to France for paper alone. On the 7th of November, 1693, a bill for laying a stamp-duty of a penny on every number of a periodical publication consisting of a whole sheet, and of a half-penny on a half-sheet, was passed by the House of Commons. Whilst this law was in dependence, there was a tract published, entitled "Reasons humbly offered to the Parliament on behalf of several Persons concerned in Paper-making, Printing, and Publishing the Half-penny Newspapers." From this tract it appears that there was then in London *five* printers (master-printers) engaged in these cheap periodical publications, which are spoken of as one of recent origin. The quantity of paper consumed is estimated, in round numbers, to be at least twenty thousand reams per year. Each of the five printers, it is stated, "pays 9*s*. per week duty to his Majesty, over and besides 1*s*. for every advertisement therein inserted, so that, by a like computation, each printer of the said half-penny newspapers pays *communibus annis* to the king the sum of about 60*l*., besides what the paper-maker pays.

Another objection to the stamp-duty was: "For that the said newspapers have been always a whole sheet and a half, and sold for one half-penny to the poorer sort of people, who are purchasers of it by reason of its cheapness, to divert

themselves, and also to allure herewith their young children, and entice them to reading; and should a duty of three half-pence be laid upon these mean newspapers (which, by reason of the coarseness of the paper, the generality of gentlemen are above conversing with), it would utterly extinguish and suppress the same." It is added, that hundreds of persons and families get their bread by selling the publications in question. Many blind persons are stated to be thus employed, and "divers of them," says the account, "who are industrious, and have but a penny or three half-pence for a stock to begin with in a morning, will, before night, advance it to eighteen-pence or two shillings, which greatly tends to the comfortable support of such miserable, poor, and blind creatures, who sell them about the streets." This act was again enforced in the reign of Queen Anne, 1712, and led to the discontinuance of the "Spectator."

During the Revolution in England, licenses for the press were done away with, but the full liberty was not given to the press until 1694, when every restraint was removed by the firm and decisive tone of the Commons. The publishers of newspapers at this time seem to have been greatly in need of intelligence and matters of interest to fill their sheets, small as they were. A few, however, got over the difficulty in a very simple and ingenious manner. Thus, the "Flying Post," in 1695, announces, that "if any gentleman has a mind to oblige his country friend or correspondent with the account of public affairs, he may have it for 2*d.*, of I. Salisbury, at the Rising Sun in Cornhill, on a sheet of fine paper; *half of which being blank*, he may thereon write his own private business, or the material news of the day." And, again, "Dawker's News Letter" states—"This letter will be done up on good writing-paper, and blank space left, that any gentleman may write his own private business. It will be useful to improve the younger sort in writing a curious hand." Another publisher had recourse to a different expedient for filling his sheet. Whenever there was a dearth of news, he printed on the blank part a portion of the Bible; and, in this way, is said to have actually gone through the whole of the New Testament, and the greater part of the Psalms of David. From an advertisement in a weekly paper, called the "Athenian Gazette," February 8, 1696, it appears that the coffee-houses in London had then, exclusive of votes of parliament, nine newspapers every week; but there seems not to have been, in 1696, one daily newspaper.

In 1696, a bill was passed by parliament for making good the rest of the coinage, &c., by means of a duty upon paper. By a tract, entitled "The Case of the Paper Traders," published whilst the bill was before the house, we learn that "there is a bill now depending for laying 25*l.* per cent. upon paper, parchment, vellum, and pasteboard to be imported; 20*l.* per cent. on English paper, &c.; and 17*l.* 10*s.* per cent. on those goods now (in merchants' and others' hands) to be sold." These duties, it seems, would not produce more than eighteen thousand pounds per annum. It appears that there were only one hundred paper mills in England, and all but one were making brown paper and the coarsest kind of white, and these it is stated "do not one with another, annually make 200*l.* worth." One company, in particular, made eight thousand pounds worth per annum.

Altogether, the value of paper made in England at this time was only about twenty-eight thousand pounds. "The vellum, parchment, and pasteboard made and expended here the last year (1605) was not above 10,000*l.*," and "the paper last year imported was not worth 40,000*l.* (and much less will be brought in if this duty be laid"). It is calculated the proposed duty would bring in seventeen thousand six hundred pounds, from which is to be deducted the expenses of the collection. A trifle more it is admitted may be obtained from the stocks in hand, the project of taxing which, however, is characterized as a most extraordinary one, and as wholly without precedent. It would not pay expenses to collect the tax from the small dealers in the country. Of merchants and wholesale dealers, from whom alone it would be practicable to collect the duty, the number is stated not to exceed thirty-five, who might, in all, have goods on hand to the value of about sixteen thousand pounds. Upon that amount of stock the tax would be only two thousand eight hundred pounds. "The paper-makers," the statement goes on to say, "are generally very poor, and now can scarce maintain their families; but when (as by this bill required) they must pay, or give security for, the duty before they sell, this manufacture will be so much lessened that most of the mills must be ruined, and the makers, with their families, become a charge to their respective parishes. The same may be said of the parchment makers. * * The printing trade now consumes the greatest part of the paper; but if this duty be laid, the consumption will not be half what it is

now; few books but that are of absolute necessity being now printed, by reason of the present advance upon paper; much less will they be able to bear the charge upon the press when so great a duty shall be laid upon the commodity. This will ruin some hundreds of booksellers, bookbinders, and printers, and others depending on that trade."

Under this act every sheet of paper that was sold to the public bore on it the king's stamp, and offices for the retail of paper thus stamped were opened in all parts of the kingdom by commissioners appointed to see the act carried into effect. The commissioners obtained their supplies of paper by contracting with certain manufacturers. This gave great umbrage to the Company of Stationers, who complained of this opposition as unfair on the part of the government; the commissioners, on the other hand, vindicated the system on the ground of the reduced price at which the public were supplied with paper at their establishments. The latter could afford to sell cheaper than others, as they required no profits. Their capital was public capital, and they were salaried by the public. This interference in the paper trade was decidedly unfair. The two principal offices of the commissioners were at Lincoln's Inn and Southwark.

In another tract, entitled "Reasons humbly offered to the Honourable House of Commons against laying a further Duty upon Paper," the actual produce of the duties imposed is stated. This seems to have been written some time after the act of 1696 had transpired, and when a bill had been brought into parliament for imposing certain new duties upon paper. This bill is, probably, that which became a law on the 5th of July, 1698, under the title of "An Act for paying to His Majesty, his heirs and successors, further duties upon stamped vellum, parchment, and paper." The writers of the "Reasons" state that "the whole produce of the paper duty from March 1, 1696, to March 1, 1698, came but to 16,848*l.* 10*s.* 9*d.*, about one-third whereof was collected from the stock which was in the hands of tradesmen before and at the time the act was passed." By this new act the government intended to lay a duty of thirty per cent. on French paper, in lieu of that of twenty-five per cent. which had expired. If this duty shall be imposed, it is contended, French paper will cost four shillings per ream; and it is added, "note that two-thirds of the paper used for printing and common writing, which is rated in our books of rates at 4*s.* 6*d.* per ream, doth cost beyond the sea no more

than 1*s.* 3*d.* to 3*s.* per ream." Although the high duty on foreign paper in general had expired, it was still very dear, and "the dearness of paper," states the "Reasons," "is the only occasion that a great number of voluminous and useful books, in many sciences, now ready for the press, cannot be printed; to the great discouragement of trade, as well as of industry and learning, very many of the profession being forced to employ themselves on trivial pamphlets."

The "Post Boy," of January 3d, 1698, contains an account of the strife between the "New Lotteries and the Royal Oak." The "Protestant Mercury" of October 20, 1698, speaking of the lottery drawn at the Dorset-garden theatre, says "its fairness (was said) to give universal content to all that were concerned." The "Mercurius Caledonius," published at Edinburgh in 1661, was succeeded by the "Kingdom's Intelligencer," the duration of which is said to have been at least seven years. After this the Scotch had only reprints of English newspapers until 1699, when the "Edinburgh Gazette" was established. Printing was known in Ireland as early as 1551, when a book of black letter was printed at Dublin, but very little printing was done in that country until the year 1700.*

The law in force for printers, during the seventeenth century, was that which was passed in the twenty-fifth of Henry VIII., which, while it protected the native printers, prevented them from imposing upon the public at large. This act was entitled "An Act for Printers and Binders of Books." The fourth and last section is as follows:

"Provided always, and be it enacted by the authority aforesaid, That if any of the said printers or sellers of printed books, inhabiting within this realm, at any time hereafter happen in such wise to inhance or increase the prices of any such printed books, in sale or binding, at too high and unreasonable prices, in such wise as complaint be made thereof unto the king's highness, or unto the lord chancellor, lord treasurer, or any of the chief justices of the one bench or of the other; that the same lord chancellor, lord treasurer, and two chief justices, or two or any of them, shall have power and authority to enquire thereof, as well by the oaths of twelve honest and discreet persons, as otherwise by due examination by their discretions. And after the same inhancing and increasing of the said prices of the said books and binding, shall be so found by the said twelve men, or otherwise by examination of the said lord chancellor, lord treasurer, and justices, or two of them; and

* The first Irish newspaper which the British government allowed to be published was entitled *Pue's Occurrences*. It was commenced in Dublin in 1698; but as soon as it took the liberty to express any opinion about the government which was not of an appreciative character, it was immediately suppressed and both the editors and printers were imprisoned for high treason.

then the same lord chancellor, lord treasurer, and justices, at the least from time to time, shall have power and authority to reform and redress such inhancing of the prices of printed books from time to time by their discretions, and to limit prices as well of the books as for the binding of them; and, moreover, that the offender or offenders thereof, being convict by the examination of the same lord chancellor, lord treasurer, and justices, or two of them, or otherwise, shall lose and forfeit for every book by them sold, whereof the price shall be inhanced for the book or the binding thereof, three shillings, four pence; the one-half thereof shall be to the king's highness, and the other half to the parties grieved, that will complain upon the same in manner and form before rehearsed."

A similar act was passed in 8 Anne, cap. 19, § 4, increasing the penalty to five pounds for every book sold at higher prices than justices, &c., should fix it. The latter was repealed by the 12 Geo. II., cap. 36, § 3, and the law of Henry VIII. still remains the law of England.

The compositor's work in the seventeenth century was difficult. The *frame* at which he sat consisted of two *cases*, each divided into equal compartments. Experience has since taught that some letters are more used than others, and has led to an entirely different arrangement of the cases. One case now being occupied by Roman, the Italic letters, and those which are most in use, are brought close to the hand of the compositor. By this means a great deal of useless labour is saved, and time gained.

At the close of the seventh century, in a book published by J. Barrow, entitled "Dictionarium Polygraphicum," we find that "Printing is represented in Painting, &c., by a woman in a white chequered habit, with the letters of the alphabet on it, holding a trumpet in one hand, round which is a scroll inscribed *Ubique*, and, in the other, the semper-vive, or house-leak, with the word *Semper;* a printing press by her, with some implements. "White shows the impression should be pure and correct; chequered, to signify the little boxes for the letters; *ubique*, signifies its being famous everywhere."

ART. III.—1. *Report of the Council of Hygiene and Public Health of the Citizens' Association of New York, upon the Sanitary Condition of the City.* Published with an Introductory Statement, by order of the Council of the Citizens' Association. New York, 1865.

2. *Second Annual Report of the New York Metropolitan District Board of Health.* New York, 1868.

3. *Contributions to Vital Statistics; and a Development of the Rate of Mortality and the Laws of Sickness.* By F. G. NEISON. London.

4. *Treatise on the Sanitary Management and Utilization of Sewage.* By WM. MENZIES, Deputy Surveyor of Windsor Forest. London, 1865.

5. *Report of the Epidemiological Society.* Published by Parliament. 1853.

THE epidemic clouds which have been hanging for the past few years over Europe and America, have forced public attention to the necessity of a thorough and well-organized attempt to baffle the threatened invasion, and to deal with the question of public health as of the last importance. Hurried and imperfect precautions, taken in the midst of the calamity, and confined to the few whose circumstances allowed it, have too often marked all efforts to stay the ravages of pestilence. Poverty and disease were deemed so closely linked together that the golden talisman was reputed as powerful to control the one as to ward off the inconveniences of the other. But, it is now well understood that, when the wretched denizen of St. Giles' or the Five Points is struck down by the fever or the plague, the wealthy tenant of a West End or a Murray Hill palace is not free from the danger of taint. In virtue of the law of the equal diffusion of gases the poison-loaded fetor of typhus haunts can be quickly borne to the favoured abodes of fortune, and the last breath exhaled by the victim of contagious disease may be next breathed in the drawing-room or the opera house. The moment men became convinced of this, the common danger created a common interest, and it is now a matter of greater anxiety to the man of intelligence, who lives according to the requirements of hygiene, that the sanitary condition of the poor be raised to a proper standard than it is to the poor themselves, "who," as Ruskin says,

"still insist on their right to helpless death." Here the first step was half the journey, and whoever takes pains to study the work accomplished within the few years since this agitation commenced, by the Health Boards of London, Paris, New York, Berlin, and Vienna, will take hope that the apotheosis of Hygeia is not far off. But, in this matter, as in nearly every other, a few lessons may be gathered from history, which will teach how dangers are to be avoided, and suggest reforms still needed.

In the earliest times a diminished standard of public health and the development of maladies unknown in sparsely-populated regions were observed as a result of the conflux of large bodies of men in towns and cities, and measures were adopted to obviate the evil wherever men met to form themselves into communities. We know that the strictest sanitary ordinances were enjoined on the Hebrews in their encampments, and their legislator has minutely recorded the manner in which they were directed to observe cleanliness in their persons and in their habitations. And from Homer we learn that, on the cessation of the pestilence which the anger of Apollo had provoked among the Greek troops, Agamemnon gave orders for a general cleansing of the forces, and that the cleansings should be cast into the sea.* The order is a good evidence of the great importance attached, even at that early period, to the efficacy of sanitary measures, and their recognised superiority over libations and holocausts.† It is a pity the poet did not give us a detailed account of this cleansing process, since we should, mayhap, find that many of our present camp regulations had been forestalled in the tented fields around Troy. Whatever the nature of it may have been, we may fairly conclude

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* Λαοὺς δ'Ατρείδης απολυμαίνεσθαι ἀνωγεν
Οἱ δ'ἀπελυμαίνοντο και εἰς ἅλα λύματ' εβαλλον.—Iliad, lib. I., 313–4.

† The action of the Argive leader in ordering a purification of the forces, previous to libations and burnt offerings of bulls and goats, brings forcibly to mind the reply of Lord Palmerston, then Prime Minister of England, when asked to proclaim a public fast in anticipation of an approaching visitation of the cholera. 'The best course,' said he, 'which the people of this country can pursue to deserve that the further progress of the cholera should be stayed, will be to employ the interval that will elapse between the present time and the beginning of next Spring in planning and executing measures by which those portions of their towns and cities which are inhabited by the poorest classes, and which, from the nature of things, must most need purification and improvement, may be freed from those causes and sources of contagion, which, if allowed to remain, will probably breed pestilence and be fruitful in death, in spite of all the prayers and fastings of a united, but inactive people."—*Buckle's History of Civilization in England*, vol. ii, p. 467.

that it was both thorough and effective, since the offscourings were not allowed to remain as a source of pollution in the neighbourhood, but were all cast into the sea.

Commentators on passages of the ancient authors, relating to religious sacrifices and ceremonies, have imagined that they saw in many of them excellent sanitary regulations, which rulers endeavoured to enforce more effectually under the guise of religion. Thus Lycurgus prescribed the immersion of new-born babes in a bath of cold wine, ostensibly as a religious ceremony, but, in reality, that the shock might determine against sickly infants. So, likewise, abstinence from the flesh of certain animals which were deemed unhealthy, was effectually enforced by presenting those animals to the vulgar mind as objects of adoration. In this way the Egyptian priests restrained the people from using the flesh of the shrew mouse, the ibis, the cat, and the hippopotamus.* But not till large cities sprang up in the plains of Mesopotamia, till the wealth of the Assyrian empire built Nineveh amid the sands, and Babylon rose with a splendour which has immortalized its name, did the most serious inconveniences arise from these compact centres of population, and not till then were permanent means adopted to combat influences injurious to the public health. Time has so nearly obliterated all vestiges of those ancient cities, that it is with difficulty we can detect imperfect evidences of sanitary measures, and we are still in doubt whether these were the result of accident or design. Layard tells us that the houses of Nineveh were built in the midst of gardens, separated from each other by spacious intervals, and that the plain around the city was a network of canals. In these two circumstances we find the principal condition of a sound sanitary system—fresh air and ventilation with a plentiful supply of water—and, we may add, facilities for removing the impurities of a crowded population. But we must come down to much later times before we meet with signs of precautionary measures which were evidently dictated by a regard for the public weal, and which were the forerunners of our modern sanitary code.

The gymnasia of Grecian cities, first established for the instruction of youth in manly exercises, speedily assumed a higher function before the law, and were regarded as health-

* *Porphyr. de Abstinentia*, 4. 9.

giving founts, whence fresh stamina might be imparted to the blood and sinew of the country. To increase their utility for this end, baths were added, porticoes constructed, and public libraries were stationed in and around the gymnasia, so that young and old, studious and indolent, might be called forth from the pent-up atmosphere of their homes, to breathe the fresh air which circulated freely in those colonnaded shapes. How necessary it was to hold out such inducements to the people to quit their badly-constructed houses, and spend the greater part of their lives abroad, may be understood by a glance at the peculiar architecture of Grecian abodes.

On either side of the vestibule and atrium were *cul de sac* rooms, into which no fresh air could enter, and from which the foul air could not escape, except by the slow process of diffusion, so that the inmates were obliged to breathe again and again the constantly vitiated exhalations of their own bodies. But the outdoor attractions readily drew the pleasure-seeking Athenian from these abodes of disease, and causing him to abandon the discomforts of a cheerless home, gave him instead the light of a cloudless sky, pure air to his body, and to his mind the delights of song, oratory, and music. Unlike our modern town populations, the ancients lived outdoors; they ate, they laughed, they chatted, and slept with no roof over them but the blue vault, and only when stress of weather compelled them did they seek the shelter of their homes. Therein they enjoyed an immense advantage over the masses of our town inhabitants, who never seek the open air but when labour calls them forth. How much better would it be, for this reason, if those huge piles of tenant-houses, where close-packed masses of humanity inhale the foul poison of ochlesis, or overcrowding, were razed to the ground, and their denizens forced to live in the open air, with the privilege of going under shelter only when cold or rain compelled them. For a while, no doubt, grievous inconveniences would arise, but in the end we should have a hardier and healthier generation. Nevertheless, Grecian cities laboured under many serious drawbacks in a sanitary point of view, and in no respect, perhaps, more than in the absence of effective systems of drainage. So far as we know, the Greeks had no underground sewers to remove accumulating filth, otherwise we should find remains similar to the Roman *cloaca*. To this circumstance, coupled with the faulty construction of Grecian houses, may be traced

the great plague of Athens, which cut off the illustrious Pericles, and the harrowing details of which have been so graphically described by the pen of Thucydides. In view of the imperfect ventilation of Grecian houses, the ignorance of glass and the use of horn in its stead, proved, though it may seem paradoxical to say so, a real benefit, and a source of much sanitary good, since the dingy medium through which the light thus passed entailed the necessity of open doors and windows much more than if glass had been in use, and thus ensured an admission of fresh air, even against the will of the tenants. Moreover, as the ancients were not acquainted with the so-called modern improvements in dwellings, their outgoings from the polluted air of their homes were much more frequent, and by submitting to a few inconveniences, which to us would be unbearable, they often gained the priceless boon of health. But so faithfully did the Romans reproduce whatever good they found in Grecian institutions, that we may find in the description of Roman sanitary provisions, whatever the Greeks had previously accomplished.

The experience of all times proves that the first condition to be consulted in the building of a town or city is the establishment of some means by which the filth and impurities, resulting from the ceaseless decay of organic matters, may be removed; and so we find that, when Rome began to assume the dimensions of a respectable town, about two hundred years after its foundation, the enterprise of its king built a sewer which has been the theme of admiration to the present time, and which yet, after a lapse of nearly three thousand years, is the common outlet for the impurities of the city. Pliny calls this the most wonderful work of Rome, a navigable city, and says that mountains were dug from the bowels of the earth in its construction. Of its vast size we may form an idea from the statement of Procopius, that a man on horseback, or a load of hay drawn by two horses, could easily pass through. Subsequent rulers perfected this splendid sewer by extending a very close network of drains through the city, all of which connected with the *cloaca maxima*. A very steep incline was given to these subsidiary sewers, so that at night, when the din and tumult of the city was hushed, the murmur of the drainage at every street corner could be distinctly heard, and no sedimentary deposit could obstruct the free discharge of their contents. The abundance of water with which the city was supplied al-

lowed the frequent flushing of the sewers, and often when the impurities were cleansed away watermen pulled their boats hundreds of feet into the *cloaca maxima*. The efficiency of these outlets for filth can be best understood by comparing the salubrity of the Roman climate in former times with what we find it to-day * * * The *mal 'aria*, which is the curse of modern Rome, was then unknown, and the Campus Martius, which constitutes the principal site of the present city, was as healthy as the slopes of the Aventine.

There can be no doubt that the healthiness of ancient Rome, when a population of at least two millions swarmed within its limits, is attributable, in a great measure, to the thoroughness of its sewers, which swept away the vile refuse that, two thousand years later, is often allowed to fester and rot in the streets of cities. Some deny the great antiquity of the *clouca maxima* on the ground that the arch was unknown to old Etruscan architecture, but the statements of Livy and Suetonius are too positive to admit such a doubt, and the authority of the most reliable paleologists, among whom may be mentioned Niebuhr, refers this work to the reign of Tarquin the Proud.*

But the importance attached by the Romans to a complete system of sewerage, as a fundamental condition for the maintenance of public health, may be still better illustrated by the means they employed to drain the Colosseum and to preserve cleanliness in its interior. This vast enclosure comprised within its walls an area of two hundred and forty-nine thousand eight hundred and forty superficial feet, and was capable of accommodating eighty thousand persons constantly assembled to witness the games. Here were, eating and sleeping for days within a crowded amphitheatre, thousands whose lives would have been fearfully endangered were it not for the admirable and effective systems of drainage and ventilation employed.† Next to an efficient system

* Strabo, 235; Livy, lib. 1, cap. 38; Rome in the Nineteenth Century, vol. 1, p. 249.; Burgess, Antiquities of Rome, vol. 2, p. 223.

† In order to understand the means used for this purpose it would be necessary to include a detailed account of the complex architecture of the Colosseum. We refer the curious to the evidence given by Ed. Cresy, C. E., before the Metropolitan Sanitary Commission of London (Pp. 333, 335, First Report, 1847). Suffice it to say that the provision was admirable in both respects, for constant currents of air floated through the enclosure, and so decided an inclination was given to the drains that all refuse matter was effectually swept away. As an evidence of the materials used in the construction of the sewers, Mr. Chadwick, the great Sanitary Reformer of London, told the Commissioners of Sewers that

of drainage, or rather of equal importance with it, may be mentioned the means by which a copious supply of good water is furnished. In this respect Rome was better off than any city before or since. According to Procopius, no less than fourteen, and according to Victor, no less than twenty, aqueducts poured their crystal floods into the city of Rome at the rate of five million hogsheads daily. These aqueducts conveyed water from a distance of thirty, forty, sixty, and even one hundred miles, and some supplied the baths and the common people, while others were reserved for the use of the rich and noble. Many suppose that those costly structures and those solid tiers of arches, which rose in successive arcades, are an evidence that the ancients were not acquainted with the simple law of hydrostatics that water always rises to the level of its source; but, apart from the consideration that numberless illustrations of this law fall daily under observation, we have the express words of Pliny asserting it, and surely we may, without imputing this gross ignorance to the Romans, find a motive for those grand and expensive works in the inordinate love of display which prompted Vespasian to build the Colosseum.* These aqueducts were constructed in such manner that the water was freed from impurities in its course, and reached the reservoirs pellucid as glass. For this purpose cavities were hollowed out at intervals in the course of the aqueduct, and here the water was allowed to rest till the mud settled at the bottom. Pliny, in his description of these magnificent works, thus sums up: "If we consider the incredible quantity of water brought to Rome for the uses of the public, for fountains, baths, fish ponds, private houses, garden and country seats; if we represent to ourselves the arches constructed at a great expense, and carried on through a long distance; mountains levelled, rocks cut through, and valleys filled up, it must be acknowledged that there is nothing in the whole world more wonderful."†

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he had received from a friend in Zurich a specimen of the same earthenware he was then recommending for sewers. It had been laid down by the Romans, and worked till recent times, under five hundred feet of pressure.

"* The same truth is demonstrated by the use of the inverted syphon in the Claudian aqueduct of Lyons. Moreover, in the Museum of Arles is to be seen a length of lead pipe, fished up from the Rhone, and the name of the Roman plumber who made it marked at every joining. It is supposed to have been used to convey water across the Rhone from Trinquetaillade to Arles."—*Pliny, Natural History*, lib. 36, cap. 15.

† For instance, the aqueduct at Vico Vaso, beyond Tivoli, in which a canal, four feet by five, pierces the solid rock for more than a mile.—*Montfaucon's Antiquities.*

Though this eulogium savours of national pride, it is scarcely an over-estimate of one of the most valuable sanitary conditions ever devised. Next to supplying the requirements of domestic uses, the most important purpose the Roman aqueducts subserved was the provision of water for the public baths. Whoever has read a description of a Roman bath, cannot fail to have been impressed with the immense superiority the Romans possessed over us in this respect. All that a refined taste, with unlimited resources, could accomplish, was here combined; and while luxury sought new means of gratification, the public health was benefited to a wonderful extent. Here, while the body felt the refreshing shower, or languished in tepid drowsiness—while the limbs were anointed with perfumed unguents, or the skin glowed beneath the rapid friction of the strigil—the eye drank in delight from numerous paintings and statues by the best masters, and the ears were charmed by strains of sweet music; here poets and philosophers met to declaim and debate, and found ready listeners in the proudest Roman of equestrian rank as in the meanest of the plebeian rabble. Indeed, this democratic feature of the public baths constitutes their chief hygienic advantage, for, had admittance to them been refused the poor, their sanitary function would have completely failed. Ammianus, as quoted by Gibbon, says: "The meanest Roman could purchase, for a small copper coin, a luxury which the wealth of an Eastern prince could not obtain;" and Seneca, describing the bath of Scipio says: "A man thinks himself poor and mean, unless the walls are decorated with large and precious embossments, unless Alexandrian marble is pointed and inlaid with Numidian rough-cast; unless a rich and curiously variegated plastering is spread upon them in picturesque; unless the roof is covered with glass-work; unless the Thasian stone, once reckoned a scarce and curious ornament, even in some temples, now encompass the pools in which we bathe our bodies when enfeebled by fatigue after some trifling sport; in short, unless the water is conveyed in silver spouts. *I am speaking, as yet, of common baths.*" * * *

To such palaces were the poorest inhabitants of Rome admitted on the payment of a trifling sum—Horace says a farthing, and Juvenal says, children at half price—and thither they resorted at all hours of the day, exchanging the poisoned atmosphere of their tenements for the fresh air, the cleansing and refreshing waters of the thermæ. How strikingly this

contrasts with the habits of the modern poor, whose miserable bodies know not the touch of water, nor the rub of a towel, from the day of their birth till they are laid in their graves! The Roman bathers went through the same processes as the Turks and Russians of the present time; they were showered, sweated, chilled, kneaded, rubbed, dried, and anointed; they then played at tennis or quoits, and went forth fit soldiers to be enrolled in the invincible ranks of Marius, Sulla, or Scipio. The flesh scrapers, used for removing the filth impacted in the pores of the skin, served a very important sanitary purpose, for physiologists agree that next to a sound condition of the lungs and kidneys, a healthy state of the skin is essential for the removal of the impurities of the body. Indeed, of this there can be no doubt, when we reflect on the number of pores in the skin, and the vast deal of exhalations they can give off when free and unobstructed. The strigil not only accomplished this, but stimulated capillary circulation, and diffused a healthful glow over the surface of the body.

Of the importance which the Romans attached to bathing, the magnificent remains of the Roman thermæ still bear ample testimony. The baths of Titus, Caracalla, and Diocletian are, even in their ruins, proud monuments of Roman pomp and cleanliness, and the latter from purifying the body now performs a cleansing process for the soul, having been converted into a church by Michael Angelo. The Roman houses were certainly not model tenements, for the want of a thorough communication between the rooms prevented a free distribution of air in the houses of the poor, and the ceilings were so low that the inmates were barely able to stand erect. The streets, too, especially in the lower quarters of the city, were narrow and tortuous, and the air circulated through them with difficulty. These evils were greatly aggravated during the empire, when the luxury and extravagance of the court and the nobles increased the number of the poor, and rendered their poverty more abject. Then towering piles of dwellings sprang up, mushroom-like, and polluted the air with the offscourings of their countless denizens, the people lost self-respect and became fond of filth, the Romans lost their distinctive character, and the seal of doom was already upon their city. Of these evils Juvenal frequently complains. He thus speaks of the excessive height of the houses :*

* Augustus had ordained that no house should exceed seventy feet, but, as we see, the ordinance was neglected.

"And first behold the mansion's towering size,
Where floors on floors to the tenth story rise."—Sat., III.

And again of their insecurity:

"For thus the stewards patch the riven wall,
Thus prop the mansion tottering to its fall;
Then bid the tenant court secure repose,
While the pile nods to every blast that blows."—Ibid.

But these unwholesome influences did not exist in the days of the Republic and the first emperors, for the numerous wars for which sturdy soldiers were required induced the republican rulers and the early emperors to look on the citizens of the State as children who owed rights to their mother, and to whom, in turn, belonged all the advantages which her proud position could bestow. Hence, the government took the liveliest interest in their comfort and well-being, and though, pagan-like, it cared little for the sick and deformed, yet no modern nation has taken greater pains to promote the health and happiness of its physically-sound citizens, than the Roman Republic and the early Roman Empire.

It is true that, now-a-days, many admirable institutions, unknown to the Romans, exist, by which two most important adjuncts to hygiene may be gained, viz., education and religion; yet when we see countless numbers of human beings a prey to demoralizing and unhealthy influences, we must admit that these two instruments of good have failed in their sanitary mission. The State cares no longer whether thousands upon thousands breathe a poisoned air in abodes of death, yclept tenant-houses; it considers that its duty towards its children is discharged when it sees that the laws are enforced. But Rome, knowing that her citizens were the stay of her existence, prepared to do battle for her at any moment, felt that, as a condition of self-preservation, she had to provide for their physical well-being, and release them from the operation of all causes prejudicial to a high standard of health. With this view, baths, porticos, campi, and amphitheatres, were constructed, and the proletarians were called forth from their tenements, to share with the proudest patricians the entertainments which the munificence of the State provided.

Evidently the Roman government comprehended the truth that wide-spread depression of spirits arising from poverty and its concomitant train of evils, is the parent of that discontent which in modern times has led to the overthrow of so many

States, while it is at the same time the prolific source of disease and physical degeneracy. And though the fastidious tastes of modern days might find fault with the gross *pabulum* offered to the mind in the gladiatorial contests and the exhibitions of the amphitheatre; yet, so far as they inspired cheerfulness and contentment, their hygienic mission was accomplished. One modern ruler, at least, has appreciated the same idea; and if we could but know the secrets of Baron Haussman's breast, we should feel assured that the Prefect of the Department of the Seine considers that Paris owes its immunity from epidemic more to its galleries, parks, and gardens, which are free alike to the workman in his *blouse* and to the *grand Seigneur*, than to the exertions of the Sanitary Board. The mind is as liable to disease as the body and where the means of keeping it in a healthful condition are neglected, how can bodily well-being be preserved? Music and pleasant scenes, the verdure of the field, the foliage of the grove, crystal sheets of water, the exercises of the gymnasium, the excitement of the course, these are the agents which bring about the *mens sana in corpore sano*, more effectually than tons of chloride of lime.

Hence, special officers were appointed at Rome to provide entertainments for the people; and after the time of the Emperor Claudius, if the theoric fund failed, the Questor was obliged to defray the expenses from his private purse. The wise policy of Rome in this respect has been admired by all, and some sanitary enthusiasts imagined that the Saturnalian festival, during which all work was suspended, and even the *vernæ*, or born slaves, were allowed the same privileges as the citizens, was instituted with the same end. However that be, it is certain that it was a main object with the Roman government, both Republican and Imperial, to elevate the physical condition of even its lowest subjects to the highest standard; and however much we may be disposed to question the means when viewed by the light of Christian morals, still, when we look at the result from the standpoint of hygiene and sanitary ethics, we cannot withhold our admiration.

When the hordes of the North overran the empire, they buried in the general ruin whatever sanitary good the limited knowledge of the Romans had accomplished, and then arose that terrible series of plagues which for many centuries continued to decimate the countries of Europe, and at one time swept away a quarter of the population of the old world.*

* Hecker's History of the Epidemics of the Middle Ages.

In tracing the history of those dreadful calamities, the constant testimony that they were the offspring of ignorance and neglected sanitary precautions affords an instructive lesson. Dr. Hecker, in his well-known history of the epidemics of the middle ages, says that the sweating sickness was a legacy left by the wars of the Roses, and first developed itself in the army of Richmond, worn out by exposure and living in utter disregard of camp regulations. The same author remarks that many of those pestilential visitations were the *sequelæ* of war, and arose as much from popular depression of spirits and universal despondency as from the operation of positively insalubrious causes.

The history of the rise and progress of mediæval towns furnishes an easy explanation of the terrible scourges which ran up the mortality bills to so appalling a figure, and kept the population so low. Neither Paris nor London knew the benefit of an underground sewer, but all refuse matter was cast into shallow drains, which ran along the surface of the streets. In London, especially, the excessive filth filled the air with poisonous emanations, which proved terribly destructive. In many streets there were no pavements, and the circulation of the air was prevented by the projecting eaves of the houses almost meeting at the top, while the intervening space was filled with enormous sign-boards. It was impossible to wade through the mass of filth in midday without a lantern, while the exuvial *sordes* battened in holes and crevices where a gleam of sunlight never entered. Erasmus, in a letter to the physician of Cardinal Wolsey, presents a curious picture of the inside of a London habitation. "The floors," he says, "are commonly of clay, strewed with rushes, which are occasionally renewed, but underneath there lies unmolested an ancient collection of beer, grease, fragments of fish, spittle, the excrements of dogs and cats, and every thing that is nasty;" and we learn elsewhere that even the presence chamber of Elizabeth,* in Greenwich palace, was littered with hay. Later still Macaulay tells us that, "if the most fashionable parts of the capital could be placed before us, such as they were in the reign of Charles II., we should be disgusted by their squalid appearance, and poisoned by their noisome atmosphere. In Covent Garden a filthy and noisy market was held close to the dwellings of the great. Fruit women screamed,

* Heberden's Observations on the Increase and Decrease of Different Diseases.

carters fought, cabbage stalks and rotten apples accumulated in heaps at the thresholds of the Countess of Berkshire and of the Bishop of Durham. * * * St. James' square was a receptacle for all the dead dogs and cats in Westminster."

Nor were the people of other cities better off. Paris, Vienna, and Constantinople gave offence to the eyes and to the nostrils at every step. The air was polluted not alone by the rotting carrion which often lay in ghastly heaps along the unpaved streets, but the atmosphere was loaded with deadly effluvium from the intramural graveyards. This was notoriously the case in London and Paris, where the terrible mortality necessitated the frequent opening of graves, and the carelessness of the diggers, who were amenable to no special law, gave a few shovels-full of earth for interment.* This evil became so aggravated that the neighbourhood of the cemeteries was deserted, and at night they shone at a distance with a brightly luminous phosphorescence. The water, which was for the most part supplied by pumps, was so strongly saturated with the refuse liquids which had been soaked into the ground, that diarrhœas and dysenteries became epidemic, and the ratio of deaths in proportion to the population was frightful.

The little importance attached to statistical tables has left us entirely in the dark in regard to this proportion during the long period of the middle ages; but, even dating from the time that tables began to be kept, we find enough to assure us that the mortality of the European capitals was almost incredible. Thus we find that in London, in the year 1741, the number of deaths was thirty-two thousand, while in the year 1809, after the population had more than trebled, the number was only sixteen thousand six hundred and eighty. And so in other large cities the mortality, when first ascertained by return bills, was appalling. One in thirteen, and even one in eleven was the average proportion of deaths. Nor need this so much astonish us when we reflect on the intensely insalubrious character of the influences which were preying on the public health. Cellar habitations, utter strangers to the light and air of heaven, swarmed with the bulk of the labouring classes, whose bodies coarse and unassimilable food wore out instead of nourishing, while drunkenness and bestial depravity, aptly imitated from the upper classes, still further

* See Bills of Mortality for London, Metropolitan Board of Health.

enfeebled their frames. Every square foot around them exhaled fetid poison. The sewers were defective, the water smelt rank with the decay of organic matter, fever constantly lurked in the poisoned air, and each change in the weather served to aggravate these abominations, for the rain churned the seething compound of liquid poison, and the sun drew therefrom reeking vapours laden with still more subtle venom. Institutions of charity supported by the State were mere charnel-houses, which but to enter was a boding of death. Here partial starvation was added to the above list of non-sanitary agents, and death reaped a more abundant harvest.

And yet so little did these facts affect public sentiment, that most persons considered a bottle of vinegar, or a perfumed *sachet*, quite sufficient to ward off the approach of the most violent distemper. And so affairs would probably have continued, had not men's attention been aroused by the silent eloquence of figures. These unerring *indices* first told the community that the harvest of death was so great as to threaten the existence of the race, and that the demand for reform was imperative and immediate. We may consider these statistics as the foundation of modern sanitary science, and all the good accomplished by health boards as dependent on the light they furnish. They are the pulse which indicate the character, number, and variety of the agencies sapping the fortress of life. It is through them we diagnose the health of the community, and by them we are enabled to prescribe the requisite treatment. In this respect an entire population is as one individual, subject to a great number and variety of disturbing influences, capable of being differently affected at different times, in different parts, according to the varying condition of surrounding circumstances, and it is only as these circumstances are discovered and appreciated at their proper value that relief can be afforded. The bare record of deaths would be comparatively valueless; it would be as if we were told that a friend was sick, without the disease being mentioned. But when we hear the nature of the disease, its intensity, its duration, its progress, &c., we are at once able to speculate on the result, and determine what remedies to use, and what good may be derived therefrom. All this statistics accomplish for the community, for when the proportion of deaths by different diseases is ascertained, when sex, colour, age, nativity, residence, occupation, and constitution are mentioned with

reference to this proportion, we can investigate the causes determining such a result, and, if we discover them, take measures accordingly.

The more numerous are the subdivisions in statistical records, the more light will sanitarians have to guide them in their operations, just as the more minutely the symptoms of a disease are described, the more readily will the physician detect its presence. To draw forth invaluable treasures we have but to sink our shaft deep into this mine of truth. Every fact discovered is a general law, and, as such, fraught with highly important consequences to every one whom its operation reaches. If, for instance, carefully kept statistics should demonstrate a peculiar connection between stature, complexion, physiognomy, &c., and a tendency to certain maladies, those concerned would at once know how to comport themselves in the presence of circumstances favourable to the development of these, and so would often be indebted to the arduous computations of the statistician for immunity from disease. It is true that such a connection has not yet been established, but who, for all that, can deny its possibility? If the indefatigable efforts of our present head of the Bureau of Vital Statistics were seconded by all the physicians of New York, what a flood of general truths of this nature would flow in upon us!

Florence Nightingale has truly said that "the most minute and practical examination of personal and local conditions is the very foundation of sanitary statistics." Even now important discoveries are being made, and so rapidly that the statistical aspect of sanitary science, from having had no existence a few years ago, has suddenly taken the foremost rank. According to Sir John Herschel we should proceed in our statistical enquiries: "First, by asking distinct, pertinent questions admitting of short and definite answers. Second, by calling for exact statements on all principal points. Third, by pointing out the principal circumstances which should be observed. Fourth, by securing their transmission to a common centre." Another distinguished authority on sanitary matters thus expresses himself with reference to the same subject: "One of the first great objects of sanitary organization should be to watch the death-rate, to watch it not only over a city or a parish, but, in detail, to watch it with due regard to difference of age, sex, place, and circumstance, to watch it from month to month, and even from week to week, to watch it as affected by different diseases,

particularly what are termed epidemic diseases, and such diseases as we have reason to believe to be in a great degree preventible, and this done to make known the result from time to time to those who are chiefly concerned in sanitary evils and their removal, so as effectually to bring home to the dwellers in darkness, ignorance, and disease, the immense significance of the facts taught by these figures."

This method of procedure has been carefully observed by our modern compilers of records, and one has but to glance at the Annual Report of the New York Board of Health, or the Registrar-General's Sixteenth Annual Report for England, to be convinced of its adequateness. Thus, looking over the tabular statements of deaths alone for nine months, as given in the Annual Report of the Board of Health for the Metropolitan District of New York, we find the following exhaustive and systematic arrangement. The first distinction is between males and females, and a separate, complete statement is given for both. The causes of death are distributed into five general classes, of which the first is that of zymotic diseases. Of this class four orders are given, the first of which embraces the miasmatic diseases, twenty-four distinct varieties being enumerated. The number of deaths by each of these is set down in parallel columns for different ages from one year up to five, and in quintades, from five to a hundred. The total of both sexes and a percentage of each cause in total is added. The next order is the inoculated diseases, four varieties being given with the same tabulated distribution. The third is the order of dietic diseases, containing five varieties, and the fourth that of presoteric diseases—one variety. The second class embraces all constitutional diseases of which two orders are given—diathetic diseases and tubercular—eleven and six varieties being ranged under each head respectively. The third class gives local diseases—eight orders. The first order—nervous diseases—twenty-one varieties; second order—circulatory diseases—eleven varieties; third order—respiratory diseases—twelve varieties; fourth order—digestive diseases—twenty-one varieties; fifth order—urinary diseases—nine varieties; sixth order (females)—generative organs—five varieties; seventh order—locomotory diseases—four varieties; eighth order, integumentary diseases—four varieties. Fourth class—developmental diseases—four orders. First order—developmental diseases of children—ten vari-

eties; second order—developmental diseases of women—seven varieties; third order—diseases of age—two varieties; fourth order—diseases of nutrition—two varieties. Fifth class—deaths by violence—four orders. First order—fractures, accidents, and negligence—twelve varieties; second order—murder and manslaughter; third order—death by suicide—four varieties; fourth order—execution—one variety—hanging.

We here have, differentiated according to the best nosological lists, one hundred and seventy-five different causes of death manifested in their operation among a population of one million two hundred thousand persons, with the distinctions of sex, age, condition, occupation, colour, nativity, and residence. It is true these figures represent only an approximative analysis, with the disadvantage of errors arising from individual judgment, but it is as close an approach to the truth as is possible under the circumstances.

The same system is pursued in the Registrar-General's Annual Report, and the returns of the various *arondissements* of Paris, and is applied equally to the social and geographical distribution of the population. The mass and maze of figures, the computations, comparisons, and proportional deductions in these statistics, afford evidence of severe and conscientious labour, and are an earnest that, with increased observation on the part of those whose duty it is to furnish information to the sanitary bureaus, the most decided sanitary advantages will accrue to the inhabitants of large cities.

Previous to the year 1839 the record of deaths and diseases in the great European cities was so imperfect, that people were really not aware what havoc the fell-destroyer was making on all sides of them. Because they did not see the mischief, they did not trouble themselves about it, and no doubt enjoyed the assuring consolation that the condition of the poor and labouring classes was all that could be desired. In the year 1838 three London physicians, intimately acquainted with the sanitary, or rather non-sanitary condition of that vast metropolis, addressed urgent letters to the Poor-law Commissioners, calling their attention to countless nuisances which were undermining the public health, and fast threatening the scourge of epidemy. The matter was taken up by the House of Lords, and enquiries were at once set on foot to ascertain the exact sanitary condition of the principal cities in the United Kingdom.

Figures at once did the business. The first annual report of the registrar-general was published, and the frightful condition of the poorer classes in the large cities and in the manufacturing towns was brought to light. Mr. Farr, who busied himself diligently in investigating these facts, and to whom we are indebted for some of our most valuable sanitary reforms, compared the mortality of about seven millions of persons, one-half of whom were located in towns, the other half in counties. He found that the aggregation of persons in the cities caused double the number of deaths from epidemics and from nervous disorders. In counties, compared with cities, deaths by convulsions were as one to three, and deaths by acute diseases of the lungs as one to two-and-a-half. The deaths from consumption were increased thirty-nine per cent., those from childbirth seventy-one per cent., and those from typhus fever two hundred and twenty-one per cent.! The total number of persons in the metropolitan districts of London who received out-door parochial relief during the year 1838, was seventy-seven thousand one hundred and eighty-six, and of these thirteen thousand nine hundred and seventy-two had been prostrated with typhus fever during the course of that year. Further enquiry also proved that this number dwelt within a very circumscribed limit. When the condition of other cities was enquired into at the same time, a similar and even worse state of things was found.

At length the cause of all those miseries was investigated. For the first time it became generally known in England that ill-ventilated and overcrowded tenements, defective sewerage, an insufficient supply of water, and want of nutritious food were at the root of those excessive mortality bills which had just frightened the nation. In the town of Nottingham, out of eleven thousand houses eight thousand were found to be built back to back, in the utter impossibility of ventilation.* In Liverpool there were seven thousand eight hundred and sixty-two inhabited cellars—damp, dark, dirty, and ill-ventilated—lodging one-seventh of the whole population. There were, besides, two thousand two hundred and seventy *cul de sac* courts in which from two to six families resided. In Manchester out of one hundred and twenty-three thousand two hundred and thirty-two workers fourteen thousand nine hundred and sixty lived in noisome and disgusting cellars. In a single ward in the town of Leeds, containing fifteen thousand

* Journal of Statistical Society, 1840.

four hundred of the working classes, three streets were found to have sewers, thirty-eight to have none, and the state of forty was unknown. The condition of Glasgow, Scotland, was still worse, for here twenty-one thousand eight hundred persons were stricken down by typhus fever at the same time,* while throughout the cellars and wynds of that busy city a population of thirty thousand lived in the utmost squalour and wretchedness. The reports for the metropolitan districts of London exhibited frequent pictures of this sort: in one small garret the husband ill of typhus, a sick child stretched across his bed, two others sleeping under the bed, the two window recesses let to two lodgers at sixpence a week, as resting places for the night, the wife, a young, healthy woman, sleeping in the same bed with her sick husband. Dr. Symmonds, of Bristol said that he found in that city a room twenty feet by sixteen, in which thirty persons were in the habit of sleeping at night, and that one morning seven of them were corpses.

These are the stray facts gleaned at random from a mass of evidence which, for the first time, brought forcibly before public attention in England the dire condition of the poor classes whom legislation had hitherto entirely ignored. Elsewhere affairs were no better. It is true that in Paris, Vienna, and St. Petersburg, a medical police had long been established, but the want of proper statistical grounds on which to base some action, had nearly rendered it inoperative. The narrow and winding streets of Paris were no better than slums and purlieus where a festering mass of humanity rotted and died. Especially was this true of the Quartier Latin. In Constantinople and Vienna the mediæval plague-spirit still breathed its deadly blasts at intervals, and of course enquiry led to the establishment of the same result, viz., that neglected sanitary precautions, squalour, indigence, and reeking rottenness were the scourge which chastened the people from time to time.

The alarum thus sounded awakened attention on this side of the Atlantic, and in New York a condition of affairs was discovered, which one year before would have simply been deemed incredible. The Five Points were almost for the first time invaded by the footsteps of the sanitary patrolman. The low quarters of the Sixth and Fourth Wards were visited, and though the overcrowding which rendered the air of St. Giles' and Angels' Meadow

* Dr. Cowan, Vital Statistics.

gaseous poison, was not here quite so bad, still every known insanitary influence was at work to undermine the public health. Unsewered streets, insufficient water pumped from soil sodden with the soakage of ordure, an atmosphere polluted with the exhalations of reeking street filth, underground dwellings—these were the agencies which bred, or at least fostered, the first great cholera visitation in New York.

When these facts were brought before the notice of the public, much was said and written about the necessity of sanitary reform. The City Inspector's office was besieged with complainants who gave detailed accounts of numberless nuisances, which everywhere threatened imminent danger to the health of the city. Magnificent promises were made that a sweeping reform would at once be instituted; the plans, even, were sketched out and made public; New York was to become the paragon of cities in a sanitary point of view; and already, in anticipation of the work which was to be accomplished, the people congratulated themselves on having so beneficent and public-spirited a municipality. But, as every one too well knows, such promises were made only to be broken, and for twenty years thereafter the residents of New York, instead of experiencing relief from their grievances, felt that the tide of disease, filth, and destitution was only the more strongly setting in upon them. Uncleaned streets, rookeries, and fever-nests continued to multiply; tall chimneys, in quick succession, reared their hideous shapes, and belched forth clouds of poison-laden smoke; slaughter-houses sprang up in the most crowded districts, and tainted the air with the emanations of their blood and refuse, which used to remain for days festering under a midsummer sun; typhus fever, smallpox, and dysentery reigned supreme along the river-side streets, and never suffered molestation from the presence of a physician, while the hope of reform appeared as distant as ever.

After a full discussion of the condition of the poor in London, Paris, Vienna, and New York had appeared in the public prints, the conclusion was reached that the first step towards a permanent reform should be an abundant supply of pure water, for consumption and for cleansing purposes. When we consider that most ancient cities but rarely suffered from a dearth of pure water, it will be interesting to note the terrible insufficiency of this indispensable article in some of our principal cities. Taking London as an example, we

find that up to a few years ago the supply of water was entirely inadequate. From twelve to eighteen gallons per head was all that the utmost efforts of the water companies could supply. The new aqueduct, however, increased the amount, and to-day about one hundred and eight million five hundred thousand gallons are distributed daily among a population of three million. And yet the upper and middle classes alone have profited by the surplus, for the rate of supply is still the same for the poor. A late resident medical officer in one of the London fever hospitals, while investigating the course and cause of fever, thus speaks of the insufficiency of the water supply: "First, as regards the water supply of these nests. This is extremely deficient. Those houses the best supplied have each a butt holding about eighty gallons, into which water flows from a stand-pipe, from ten minutes to half an hour each day, and is supposed to supply the wants of twenty persons for cooking, the washing of their persons, house, and linen, and for the rinsing down of their water-closets, at such time as it may suit the caprice of any one of the inmates. On Sundays even this supply is absent, the water of the day before is gone, and in many houses that for the Sunday cooking has to be begged from neighbours who may have provided themselves with a larger butt, who are more provident or more dirty. Sometimes, for part of Sunday and Monday, a whole court has to borrow for their scant necessities, from a 'Public,' at the corner. * * * More than nine-tenths of these water-butts have no covers, and fully half are so placed as to catch the drippings from the foul eaves of the houses, and are lined internally with scum and slimy vegetation. More than a few are so rotten that one's fingers can be pushed through them, and they allow the water to run rapidly off—an evil for which there is some consolation, as it is better than that the water should be swallowed after it has imbibed the soppy sewage, sometimes of the foulest description, in which the water-butts frequently stand."

During the short interval that the water flows into these butts, a long line of women forms, waiting for their turn, and sometimes after repeated efforts to procure a pitcher or bucket of water, many of those poor creatures go away without a drop, day after day. And this is the manner in which the poor of London are supplied with water even to-day! In other European cities the same insufficiency is complained of, owing to the same cause, viz., the use of cisterns and butts, and the intermittent flow of the water.

Thanks to the magnificent scale on which nature has constructed her rivers and lakes on this side the Atlantic, no such source of complaint can exist. Philadelphia and New York are the best water-supplied cities in the world. On an average, fifty-eight million gallons flow through the Croton aqueduct daily, and this, at our present standard of population, is more than sufficient to meet all the wants of the people. But the rapidly increasing population of New York will soon demand a more copious supply, and already the Croton Board, with laudable foresight, has provided for the damming of another lake inPutnam county. Philadelphia can supply seventy-three gallons a head *per diem* to her citizens, and has the credit of being able to furnish, within a specified time, more of nature's refreshing beverage than any city in the world. In the United States, therefore, the question of water-supply has been satisfactorily solved, and wherever a bank, a church, and a school give indication that the germs of a city exist, the means for obtaining a healthy and sufficient supply of water are being studied.

But, with these advantages, and the thorough appreciation of the necessity of an abundance of pure water, our citizens everywhere seem to overlook, in a very unaccountable manner, one of the most useful purposes which a copious supply of water might be made to subserve, and that is, the establishment of public baths. The hygienic and sanitary effects of such a step are incalculable; it is the first great lesson the people have to be taught, ere they can appreciate to the full the sanitary blessings which the future has in store for them. What a reproach it is to our boasted civilization that ancient Rome offers us an example of cleanliness which all our reverence for that virtue and the recognised and oft talked of close connection between public cleanliness and public morality, have failed to make us profit by! Physicians can tell us to what an extent all current disorders are dependent on the neglect of just such personal cleanliness as the establishment of public baths might obviate. Rome had to depend for her supply of water for bathing purposes on numerous aqueducts built at a vast outlay of money, whereas our seaboard cities might find in the salt water of their harbours a far cheaper and more suitable element for the same purpose. Those whose means enable them to enjoy this luxury in their own houses or to pay a high price for it in the few bath-houses we have, are well aware how indispensable it soon becomes, and what an

aversion to filth the frequent use of it engenders. In the same way no doubt the poorer classes, if the means of frequent bathing were within their reach, would come to regard the neglect of personal cleanliness as a species of sin which no consideration could palliate. A sanitary conscience would be created in them, and from attending to cleanliness of person they would soon consult cleanliness of surroundings, and so greatly facilitate for the social reformer the important question of public hygiene. This culpable negligence on the part of those to whom the guardianship of our sanitary interests is entrusted, is rendered still more culpable by the inadmissibility of the plea of ignorance.

There is no fact better understood to-day than that frequent bathings is a most valuable promoter of health. It is a fact that has received the clearest light from the establishment of sound sanitary and hygienic principles. A comparison of our knowledge in this respect with the ignorance of the ancients, will render still more striking their painstaking and our indifference. The precepts of hygiene, handed down by tradition, were exceedingly meagre and defective, encumbered with much superstition and mysticism. Galen was the first to formulize them, and from the following summary, enveloped in the mazes of a barbarous nomenclature, we may judge how valuable they were as guides in practice: "Whoso wishes to re-establish his health must investigate seven natural things, viz., elements, complexions, humours, members, virtues, spirits, and operations; six things not natural, viz., air, food and drink, starvation and repletion, motion and rest, sleep and wakefulness, and the accidents of the soul, and three things outside of nature, viz., disease, the causes of disease, and the accidents accompanying disease."*

With no better theory to guide them, the will-o'-the-wisp light of such jargon, too much praise cannot be accorded those who, in obedience to the dictates of common sense, founded the most useful and indispensable sanitary institutions. Among us it is well understood that the skin is an important excretory organ, affording great aid to the

* Qui sanitatem vult restituere debet investigare septem res naturales, quo sunt elementa, complexiones, humores, membra, virtutes, spiritus, et operationes, et res non naturales quæ sunt sex, aer, cibus et potus, manitas et repletio, motus et quies, somnus et vigilia et accidentia animi et res extra naturam quo sunt tres, morbuscausæ morbis et accidentia morbum concomitantia.

lungs and kidneys in the task of getting rid of effete materials, which have discharged their role in the system and are fit only to be ejected. We know that the want of personal cleanliness leads to the stopping up of the skin pores, and that the other organs, being compelled to take on increased activity, often break down in the effort, and fatal disease ensues. Yet, despite these well-known facts, the utmost apathy is manifested in regard to the means of instituting some reform. Notwithstanding that in this city two deep and wide rivers pour their refreshing tides almost past our very doors, we know not the benefit of a public bath.

Conjointly with the question of water-supply, another of equal importance claimed the attention of sanitarians, viz., the sewerage of towns and cities. The surface-drains to which many physicians ascribed the plague visitations of past times, were long since abolished, and underground sewers constructed in their stead. But many practical difficulties had to be overcome ere they could be made to work effectually. The entire ignorance of those who undertook the construction of them, their irresponsible action and the defective material employed, rendered the first attempts at underground sewerage unsuccessful. But perseverance triumphed, and a system of drainage was everywhere established, which conducted the sewerage in whatever direction the inclination of the channels tended. In large cities the river was made the grand receptacle for the contents of the sewers. At short intervals these debouched into the stream at tide water level, sometimes below it, and so performed their purifying mission as best they could by this irregular discharge. The merits of the system were quickly tested in most populous cities, and first in London, where woful ill-success attended its operation. The flow of sewerage into the Thames made that river an open sewer, poisoning its water and polluting the air, while the ebb and flow of the tide churned up the foul mixture, and never allowed it to flow out to the sea. Zymotic diseases flourished meanwhile, and there was a loud cry for a return to the old system or no system at all, in preference to one which rapidly threatened epidemy.* At last the offence smelt rank in the

* Faraday, in a letter to the *London Times*, 1854, thus describes the condition of the Thames before the present sewer system was in operation: "The smell was very bad and common, to the whole of the water; it was the same as that which now comes up from the gully-holes in the streets. *The whole river was for a time a real sewer.* Having first returned from out of the country air, I was perhaps more affected by it than others, but I do not think I could have gone

royal nostrils, parliament had to be dissolved, and the Metropolitan Board of Works was appealed to for the inauguration of another and more effective mode of sewerage. The importance of the question, as essentially affecting the sanitary condition of a city where three million people were closely packed, gave rise to long and earnest discussion; many plans were submitted by engineers and their claims carefully examined, but it seemed at first as if none could entirely solve the problem of thorough street and cellar drainage without making the Thames a sink of pollution. Heretofore all sewers had been constructed at tide level, and so the lower portions of the city were at best but imperfectly drained, while excavations below tide water line became cesspools from which no outlet was possible. It was proposed that in the new plan both these inconveniences should be obviated, though the difficulty of discovering such a plan was thereby vastly increased. The steam engine which had so often before proved *a Deus intersit* to the puzzled engineer, solved this new problem, and bestowed on London the greatest sanitary blessing of modern times, an irreproachable sewer system.

Three great arterial trunks were built on each side of the Thames, intercepting, at short intervals, transverse pipes, which empty into them. These mains measure from six to ten feet in the clear, and receive a steep inclination, so that no foulage can rest on the bottom. Owing to this steepness they cannot run far ere they attain the lowest depth that can be conveniently reached; the contents are then pumped to an upper level, and they pursue the same course in the next articulation. A high level, a middle level, and a low level sewer connect in this manner, and carry off most effectually the sewage of the lowest as well as the most elevated portions of the city. The low level sewers, at some points, reach the depth of seventy feet, and at Tower Hill and for miles along the north side of the Thames, it was found more feasible to tunnel through rather than excavate. After receiving the sewage from the subsidiary sewers of the districts through which they pass, these lower level sewers converge on either side of the Thames, and the contents are pumped into outfall sewers—a species of covered canal, running along the riverside to a point where the contents

on to Lambeth or Chelsea, and I was glad to enter the streets for an atmosphere, which, except near the sinkholes, I found much sweeter than that on the river."

are discharged into the stream. At this point two large reservoirs are built, capable of containing as much sewage as might accumulate during the influx of the tide. When the tide begins to fall, these reservoirs are pumped into the river, and so the sewage is wafted to the sea and the upper waters of the river remain unpolluted.

Besides these evident advantages, this system has solved the oft-recurring difficulty of the utilization of sewage. The barren wastes and swamps which bordered the Thames for miles below London have suddenly flowered, and bear as rich a vegetation as the plains of Lombardy. These "outfall sewers" are uncovered at intervals and allow the abduction of their contents, while the reservoirs furnish an inexhaustible fund of this incomparable earth-food.

From what has been said it is evident that the two great advantages of this system of sewerage are, first, the deep drainage it allows, and, second, the removal to a distance of that which, when allowed to remain too close at hand, is a source of pestilence. There can be no doubt that the adoption of this or a similar system of drainage is intimately connected with the healthiness of all the growing cities in our country, where the benefit of deep drainage would at once do away with the terrible curse of miasmatic and intermittent diseases. If we recall the ravages of yellow fever, last summer, along our southern seaboard cities and the river-built towns of the South, and give weight to the opinion that this disease is miasmatic, how important this question becomes? If the low lands and levees of New Orleans and vicinity were drained to a low depth, the probability is very great that that city would enjoy the same immunity from this terrible scourge as cities situated farther north.

Even to-day the city of New York is a favourite nest for that dismal malady—fever and ague—entirely through want of a sufficiently deep system of drainage. Above Forty-second street one is not sure what moment his joints may begin to creak, his teeth to chatter, and his whole body experience repulsive symptoms of ague. Even exemption from the disease below this line is nothing but a pleasant fiction, for a glance at the topographical map of the city by General Viele, will show that portions of Fifth and Madison avenues are, according to the laws of cause and effect, as assailable as points farther up. In Canal street and the old swamp, sewered, as they are, according to the present system, water is

reached at the depth of seven feet; and it is certain that, if these localities were inhabited, instead of being given up to commerce, they would be the favourite haunts of intermittent fever. In the made lands along the river side, where the sewers empty into the river below tide-water level, they become choked with the return of the tide, and their contents driven back to the source. Now, if a deep drain system of sewers were established, these inconveniences would be avoided. Cellars might be built without making coffer-dams of them, while the slips along our wharves would not be constantly filling up with the foul discharges from the present sewers.

Intimately connected with the question of sewerage is that of the utilization of sewer contents, by which the pernicious consequences of their continued decomposition can be avoided, and a most decided benefit conferred on agriculture. Professor Liebig writes: "Of all the elements of the fields which, in their products, in the shape of corn and meal, are carried into the cities and there consumed, nothing, or as good as nothing, returns to the fields. It is clear that if these elements were collected without loss, and every year restored to the fields, these would then retain the power to furnish to the cities the same quantity of corn and meat, and it is equally clear that, if the fields do not receive back these elements, agriculture must gradually cease. In regard to the utility of the avails of the sewerage of towns as manures, no farmer, and scarcely an intelligent person, has a doubt."*

There is a sort of compensating justice in this, which, apart from the necessities and advantages of the plan, points it out as in full harmony with the economy of nature. We have already remarked that the outfall sewers of London allow the removal of the sewage at intervals along the line, and the conversion of the barren wastes by the Thames into beds of tropical productiveness, ought to be a powerful incentive for the contrivance of some plan by which this valuable fertilizer may be entirely utilized.

An ingenious writer has observed that the triumphant solution of this question will give, in cities, a result similar to the arterial and venous system in the circulation of the blood. "As there comes from an affluent river, or some large reservoir, a great aqueduct full of water into the town, which divides itself into main pipes along the chief streets, which

* See Liebig's letter to Alderman Mechi.

then, in their turn, by one or more processes of subdivision send a small tube full of water on high pressure perpetually running, or ready to run, into every house; so let the water, carrying with it the impurities of the house, pass outwards and join a street pipe, which joins a larger pipe or sewer, and this again a larger, till the whole accumulated filth rolls onward in one volume." Though this solution of the difficulty appears fanciful, the utilization of sewer contents can never be considered complete till such a compensating balance be struck. The numerous advantages which would attend a practical solution of this question cannot be overrated. Long before the sanitary aspect of the case had engaged public attention, individual interests were at work studying the matter, and, imperfect even as were the measures concerted, their operation brought unlooked-for gain. A sewer passing between the sea and the city of Edinburgh, was tapped by some farmers owning meadow lands near by, and, though the matter appeared at first sight quite insignificant, so rapidly did the lands increase in value that, when the attention of the town authorities was drawn thereto, a prescriptive right was claimed by the owners of the land; nor would they waive it for a less sum than £150,000. This is but an instance of the lucrative results of the employment of sewage in agriculture under most unfavourable circumstances. As engineering and mechanical appliances increase we should look for the adoption of some system which, while trebling the value of produce lands in the neighbourhood of cities, will greatly aid the sanitary reformer in the solution of a perplexing difficulty.

One of the most interesting questions which at present engross the attention of hygienists is the removal, beyond city limits, of all pursuits and occupations of a nature to injure the public health. The *abbattoirs* of Paris brought under discussion the necessity of superseding the old system of slaughter-houses by concentrating this business at a few convenient points, with improved facilities for getting rid of the impurities which it necessarily generates. Warring interests prevented the sanitary authorities from effecting this reform to any great extent. The innocuous character of the business was insisted on by interested parties, and a clog thrown in the way of all enlightened legislation. A few men, who had spent their lives in the neighbourhood of large butcheries, without suffering any apparent falling off in health, were cited in evidence of the non-insalubrity of their topical influence, and all the means which large,

moneyed interests could control were used against the projected reform. It was useless to demonstrate by reason and statistics the great mortality prevalent in the vicinity of these establishments; greed and ignorance still maintained a successful fight against all attempts at amelioration, and the progress of the work in the cities of England and the United States was greatly retarded.

And yet we find the popular voice clamourous against slaughter-houses within city limits at a date when certainly their insalubrious character was far less than it is to-day. In the fourth year of Henry VII. a petition was addressed by the inhabitants "of St. Faith's and St. Gregory's, in London, near adjoining the Cathedral Church of St. Paul's," stating that the "parishes aforesaid were greatly annoyed and distempered by corrupt airs engendered in the said parishes by reason of the slaughter of beasts had and done in the butchery of St. Nicholas; and, whereas, sundry complaints have been made to the Mayor and Aldermen during sixteen years, and no remedy found." They pray the king "out of his abundant grace to aid his poor subjects in this behalf, considering that in few noble towns or cities, or none within Christendom, the common slaughter of beasts should be allowed within the walls of the same." This petition resulted in the enactment of a decree that "no butcher or his servant is to slay any beast within the walls of London, or any walled town in England, under a penalty of twelve pence for an ox or cow, and eight pence for every other beast." Of course the law remained inoperative for centuries, but was never removed from the statute-books.

The various reports by sanitary inspectors in different cities present this matter in a very forcible light, and render incontrovertible the necessity of removing, beyond the crowded districts of the city, of shambles and slaughter-houses, no matter how carefully managed. Wherever these nuisances exist, the kindred ones of fat, bone, soap, and gut boiling establishments are sure to spring and increase the pollution. "It is positively asserted," says the Report of the New York Board of Health, "that more noxious gases escape into the air from this source than would result from the decomposition of human bodies if the whole island were a graveyard." Again: "The large amount of animal matter discharged into the sewers often causes obstruction, and the stench which is then forced back through the street culverts and manholes is unendurable."

During the earlier visitations of the cholera in the cities of the United States and England, the footprints of the disease could be traced, with devious turnings, through all the districts where these plague-houses abounded. It is a consolation to reflect on the much-needed reform in this respect which has already taken place, but we can never consider the work perfected till the last quadruped has been immolated within the walls of a city. Injunctions, stays of proceedings, reclamations, and all the machinery which belonged to a cumbersome law system, hampered the first efforts of the New York and London Boards of Health to procure an abatement of the nuisances; and though in London the Board now wields unlimited sway, the opposition here is still strong, and sometimes successful.

Fat and bone boiling establishments, which once impregnated with their noisome exhalations the atmosphere of whole cities, and diffused an aërial poison-taint like the greasy stench of a crowded graveyard, have, within a few years, ceased to be wellsprings of disease. This desirable result has been brought about by certain chemical processes for the deodorization or combustion of the noxious gases. In France and Germany methods are employed for the extraction of fat which do not seem to be well understood in this country, though it is said that the yield is greater and the product superior, while the escape of offensive gases is almost nill. The hydro-carbon oils and naphtha are employed for these processes. There are several patented processes for the operation in this country, all of which have proved more or less successful. As there are few whose olfactories have not, at some time or other, experienced the rank offence of this nuisance in every city of the country, it may not be amiss to give a succinct description of the means by which fat and bone boiling are now conducted in a comparatively harmless manner.

Perhaps the most successful plan on trial is that patented by Messrs. Lockwood and Everett, and thus described by Dr. Moreau Morris, of New York: "The crude material is placed in steam-tight tanks, which are heated by steam applied on the outside. The deleterious gaseous products are forced by pressure evolved within the tank, through an iron pipe connected therewith, and continued into a separate and independent furnace, where, by a system of iron coils, which are heated to a red

heat, these gaseous vapours are so superheated that they become combustible; when in this condition they are brought by a scientific and ingenious arrangement of argand burners in contact with the flame of the furnace, in combination with sufficient oxygen to produce perfect combustion, and finally passed off by an ordinary chimney, without any offensive odour. This process certainly destroys the nuisance, is ingenious, scientific, and applicable to a variety of businesses now abandoned for the want of it, as impracticable." When we consider the simplicity and entire efficiency of this plan, and similar ones, we cannot but be struck with the apathy or stupidity which so long permitted a nuisance to spread its rancorous exhalations on every side, without the slightest measure being taken to suppress it.

There is another nuisance which corporate interests still support, against all attempts at reform, viz., the noise and poisonous exhalations of gas-houses. The deleterious influence of the constant escape of sulphuretted hydrogen into crowded districts, need not be dwelt upon. Whoever has sauntered along the river streets of New York, especially in the vicinity of the gas-houses, will need no reasoning to convince him that death was rife in the air he breathed, and that there was no occasion to wonder at the wan and wasted features which met him at every step. The experience of London amply proves the existence of adequate means for the nullification of this source of town and city insalubrity, but either a reluctance on the part of the companies to employ those means, or an unintelligent application of them, has left this nuisance almost as much a subject of complaint as ever. It is to be hoped that wherever organized boards of health exist, they will not neglect the interests of the community in this respect, and will compel gas companies, even at a large additional outlay of money, to conduct their business without rendering it an imminent occasion of pestilence.

It is gratifying to note the energy with which our Health Board have proceeded against the numberless unhealthy occupations which heretofore have been carried on under cover of the dark and winding streets of cities; and though ill-judged zeal may at times have marked their interference, they have accomplished an amount of substantial good which it would have been vain to expect from the old health organizations. The restrictions placed on the importation and storage of rags; the abolition of cesspools; the effec-

tual removal of garbage and house-slops; the crusade against cellar and basement population; these are but a few of the advantages for which we are indebted to the intelligence of recent sanitary officials, whom previous training had fitted for their duties.

But, as already intimated, all efforts will end in nothing more than a partial suppression of the evils which beset the poorer classes in large cities, till a proper *sanitary* sentiment is diffused among them; till they are convinced that happiness and comfort depend on their exertions to keep themselves and their surroundings clear. Cleanliness is the religion of the body, and as its opposite is the most frequent attendant of moral turpitude and degradation, so a due regard to it is almost the first condition for being lifted out of the slough of immorality. Whoever has read a few of the numberless reports on the sanitary condition of the poor in the capitals of Europe and America, will not fail to be impressed with this truth. Hitherto the duties of the clergyman and the sanitary inspector have been kept too distinct, and though we would not recommend the latter to assume functions evidently inconsistent with his profession, we see no reason why the minister should not in his visits among his flock, and even from the pulpit, inculcate cleanliness and hygienic habits. The positive gain to the morals of the people cannot be over-estimated; filth would become synonymous with sin, and those bodily diseases resulting from an utter disregard of sanitary and hygienic measures, would be viewed in the same light as those which are born of vice, profligacy, and crime. A moral, as well as a social distinction, would be drawn between those who cultivate cleanliness, so far as surrounding circumstances might allow, and those who heedlessly wallow in a superabundance of filth.

There are many associations whose sole object is the distribution of religious tracts among the poor, and their *colporteurs* may be met in the low quarters of every city. But surely nothing short of miracles daily and hourly performed could create a religious feeling in those crowded dens of humanity, where a ray of sunlight never enters, where a breath of fresh air is never drawn. The poor may well say, "We have asked for bread and you have given us a stone." The way must be paved for the religion of the soul by preaching first the religion of the body. Give the people well-ventilated habitations, prove to them that it is their best interests to keep these clean, give them plenty of

pure water to drink and to wash in, and teach them the necessity of doing so, give them the benefit of all the advantages which sanitary science has created, and enforce proper co-operation therewith, and of their own accord the most abjectly poor will turn their hearts to religion. Let sanitary tracts precede religious tracts, let the poor know that God requires of them to be clean bodily as well as spiritually; tell them how this may be done and what advantages of health, pocket, and domestic happiness will flow to them from the proper observance of hygienic rules, and religion will be vastly the gainer. How sadly deficient in this knowledge the poor unhappily are it is but too easy to demonstrate. If on entering a tenement-house, where the sickening atmosphere almost cries out for open windows, the first inmates we meet tell us that they keep the windows closed to keep out the dust, or because it is far more comfortable not to open them, or some one of the family is not well, or some one is afraid to take cold; if the filthy state of the house is found fault with, the ready answer is that it is just as good as the next one, or that it would be just as bad as ever in a short time if they were to clean it. We enter a room where the stifling air of the halls is intensified, and, beyond a doubt, we see a pale and emaciated figure stretched on a pallet, while several kind neighbours, on a visit to the patient, crowd the room to repletion. They breathe the polluted air, tainted too with the poison of typhus, in utter ignorance of danger, and reply to any questions on the subject that they have hitherto lived with impunity in the same manner, which sufficiently proved that there could be no harm in it.

ART. IV.—1. *Thoughts on Animalcules; or, A Glimpse of the Invisible World revealed by the Microscope.* By GIDEON ALGERNON MANTELL, LL.D., F.R.S., &c. London, 1846.

2. *A Handbook of the Microscope and Microscopic Objects*, &c., &c. By W. S. NORCUTT. London, 1859.

3. *Microscopical Researches into the Accordance in the Structure and Growth of Animals and Plants.* By DR. TH. SCHWANN.

4. *Quarterly Journal of Microscopical Science.* London.

5. *Transactions of the Microscopical Society.* London.

SURROUNDING us upon every side, an extensive and indispensable portion of the material universe, exists a multitude

of objects, so minute that the human eye, unaided by external power, cannot perceive them. The belief in invisible existences, of degrees above and below the human ratio, has been common to mankind from the earliest ages; and before the clear light of science dissipated the clouds of superstition, earth, air, and water were credited with monstrous and malevolent creations. The visible portion of nature, teeming with life, supported the belief in the existence of these invisible beings; and modern science has verified it, although it has destroyed all ideas of their supernatural character.

The portals of this unknown world, whose inhabitants are as innumerable as the sands of the sea-shore, have been opened to us by the use of the microscope, an instrument in itself so small, and in its construction so simple, that we cannot be surprised by the fact that its revelations met with but tardy reception when they were first submitted to the world at large. The man who measured his knowledge by his personal powers of observation, and this in an age when scientific information was confined to the few, may well be pardoned his unbelief in an assertion which endowed a drop of clear water with millions of inhabitants.

Although the powers of the simple microscope have long been known, it is only within a comparatively few years that it has been recognised in its true value as an indispensable companion in all research into material organization. There is scarcely a department of science, art, or industry, which has not, within the last half century, been greatly benefited by its use. At the present day its revelations are accepted by the scientific investigator as one of his chief aids. Thus the chemist defines the different angles of the mineral substances of his laboratory, and detects the presence of adulterations, or poisonous matter, in food, or in the human system; the geologist determines the composition of his favourite strata; the meteorologist explains the strange phenomena of sand-showers, blood-rains, and aërolites; the botanist studies the curious foreshadowing of the operations of human life in the vegetable; and the physiologist tracks to its hiding-place in cell, nerve, or muscle, the latent seed of disease. The philosophical toy of the past century has become a power in the hands of its masters; another instrument for augmenting the influence of man over organic matter, which opens up to his comprehension hitherto unknown elements in nature; and these, subjugated to his will, increase the endless chain of dominion which falls, link after link, into his hands.

The history of science is a record of experiments—guesses at truth; and false reasoning, based on imperfect observation, has incorporated into its repertoire many undue conclusions and empirical results. To dissipate these *ignes fatuii*, which often mislead the investigator, the most exact and minute observation is necessary, and the entire chain of reasoning must be based on established facts. In the investigation of material existences what proof so positive as the actual material condition revealed to the eye? And what medium more reliable than an instrumental aid to the vision which lays bare the composition of the minutest atom, even the five-hundred-millionth part of a drop of water? The honest doubt which searches for a positive material proof, cannot, herewith, fail to discriminate between mere probability and certainty. Who shall set a limit to the progress of legitimate investigation, or declare that man's intellect has fathomed the depths or attained to the heights of nature, even in physics alone? "Nature herself knows no pause in progress and development, and attaches her curse to all inaction."*

We have alluded, in a previous paragraph, to the antiquity of the microscope; it appears from a certain passage in Seneca† that an instrument of similar nature was well known in his time, although its invention is claimed by several Germans in the early part of the seventeenth century. True it is that Zacharias Jansen, a spectacle-maker at Middleburg, constructed a compound microscope, with an eye-glass composed of a concave lens, about 1590. Galileo made, and sent to Sigismund, king of Poland, a good instrument in 1612. In 1618, Fontana, a native of Naples, perfected one with two double convex lenses; and we are quite justified in believing him to be, as he distinctly asserts himself, the inventor of this form of compound microscope. In 1824, Mr. Tulley, of London, produced an achromatic object-glass for a compound microscope, the first one ever completed in England. About this time a thorough investigation of the capacities of the instrument was commenced, almost simultaneously, in Paris, Munich, and London; and its true merit was definitely acknowledged.

The microscope, in its simple form, consists of one or more lenses of a limited focus, which enable us to see an object

* Goethe, in *Die Aphorismen über Naturwissenschaft.*

† "Literæ quaravis minutæ et obscuræ; per vitream pilam aquæ plenam majores clarioresque coeunutur."

more clearly and accurately than with the naked eye, and it is generally called a magnifying glass. Compound microscopes are provided with an extensile tube, at the upper end of which is placed the eye-piece, and, at the lower, the object-glass; a third glass, called the field-piece, is placed within the body of the tube. The binocular microscope was first experimented on in 1851, and completed in 1852. Its chief point of difference from the styles previously mentioned consists of the substitution of two eye-glasses for the one of the old styles; thus relieving, somewhat, the violent exertion of the optic nerve consequent upon the use of the latter. The achromatic object-glass consists of two lenses, possessing different refractive and dispersive powers, so arranged that the defects of one are counteracted by the other, and a clear, steady light is thrown upon the object in view.*

One of the most important adjuncts of the microscope is the micrometer, an instrument for obtaining accurate measurements of microscopic objects. It consists of two slips of glass ruled at equal distances in very fine lines; one of these glasses is placed at the eye-piece, and the other is movable about the stage where the object under observation is mounted. The *camera lucida* is a small prism of glass attached to the eye-piece, so that a paper being placed under it, and the object to be drawn being properly focussed and illuminated, the magnified impression is cast upon the paper in such a way that a careful outliner may obtain a correct representation of the most minute object.

The mechanism for the polarization of light is in two parts, the polarizer and the analyzer. Several mediums are desirable for this purpose, viz., the Nicol's prism, the tourmaline plates, and, the most perfect, the artificial tourmalines or Herapathites. The achromatic condenser concentrates the light upon an object, defining its most delicate outlines. There are several other appendages quite requisite to the perfect working of the instrument, but not indispensable to its description.

The great body of animal life which is classed as microscopic necessarily comprehends that which has long been designated as *infusorial*, although the term does not strictly apply; for although these minute bodies were originally observed in waters infused with vegetable matter, still that condition is not indispensable to their existence, and only

* It is only within the last ten or fifteen years that these glasses have been perfected, and placed within the reach of all microscopic students.

serves as a congenial medium for their development. Microscopics are invisible to the naked eye, and in water are more or less translucent, and they seem, when viewed in a cursory manner, devoid of members, and even of some of the essential rudimental conditions of life; they are, however, endowed with the sense of touch, sometimes of sight, and they receive nourishment, and reproduce their species.

The forms of this phase of life are so strange and manifold, and the physiological qualities and properties originally attributed to them by some fanciful writers, and, later, the importance attached to their development by eminent medical theorists, is so great, as to have attracted to them the attention of some of the most learned and intelligent men. In fact, they owe their first thorough investigation and classification to Ehrenberg, the friend and co-laborer of Humboldt. He says, that "with lime and soda we can prepare glass and bricks out of invisible animalcules; use them as flints, and, with thin mountain meal composed of them, allay the pangs of hunger."

In these minute creations life exists in the simplest form wholly unaccompanied by, those complicated organs with which we are accustomed to associate its presence. A simple cell, of infinitesimal extent, lives, moves, and reproduces its species in a manner totally at variance with our received ideas of such operations. They are found in waters fused with vegetable matter, in clear streams, and in small pools filled by late showers; on the stems of water-plants is often found a mould or slime, which, when microscopically examined, is found to consist of innumerable masses of these creatures. When this appearance is bluish-white, the *Vorticella* and *Epistylis* are the predominating species; yellow gelatinous balls show the presence of the *Megalatrocha*, and the *Melicerta* exist in dark bristle-like forms; their presence is betrayed in the dust-like surface of stagnant pools, and also in the delicate, shining scums which cover the surface of some waters. In moist earth, the *Bacillaria*, or the *Diatomacea*, abound, either alive, or as a siliceous, shelly deposit. The water between 80° and 90° south latitude was observed, by Captain Ross, to be coloured a yellowish-brown by hosts of microscopic *Diatomacea;* and their remains, falling to the bottom, have produced a bank 120 by 400 feet, flanking the length of Victoria Barriers.*

* Dr. J. D. Hooker, Report to the British Association, 1847.

We cannot deny ourselves the pleasure of noting some of the peculiarities of these members of nature's great family, nor do we deem the close study of these atomic beings trivial. For "the higher enjoyments yielded by the study of nature depend upon the correctness and depth of our views; * * * the astronomer, who determines the diameter of a planet, does not feel his imagination more excited—and this is the guarantee of the precision of his labors—than the botanist who counts the divisions of the calyx, or the number of the stamens in a flower."*

We shall first speak of the *Polypes*, or *Hydras*, who, although not strictly microscopic, their size being about one-tenth of an inch, still present a decided analogy to the smaller and more difficult animalcules. Their length, when extended, varies from one to three-fourths of an inch, and they appear to the naked eye like stiff bristles; the mouth is supplied with a number of delicate tentaculæ, which serve to seek and seize their prey; the latter is sometimes several sizes larger than themselves, but never, despite superior bulk and strength, escapes the *Polype;* it seems to paralyze all struggles, perhaps in the manner of the *gymnotus*, or electrical eel. Their motions are slow, and they are apparently destitute of visual organs, while they seem attracted by the light. Thus, if a glass vessel, containing some of the species, be frequently changed with the light, on alternate sides, they will always move in the direction from which it comes.

The *Hydra*, when removed from the water, appears like a small ball, composed of minute cells, the outer layer condensed to form a skin or shield. These animals are capable of supplying the form and functions of life to as many parts as each one may be divided into. Dr. Mantell records the sub-division of one body into ten parts, each one of which grew to be a distinct and perfect animal. The solution of this seeming wonder rests in the fact that the formation of the animal is analogous to the simplest form of vegetable life, the cellulose; of which class are the confervæ, the sea-weed, the common mould, &c.; in all these each cell contains the elements of a perfect being. The simplest form of life, the monad, is a single cell, so minute that a drop of water may contain five hundred millions.

The germs of these atomic beings exist everywhere. They are classed by Ehrenberg as the *Polygastria*, or many-

* Humboldt's *Cosmos*.

stomached, and the *Rotifera*, or wheel-animalcules. The first present a widely varied appearance, and are the smallest form of life yet discovered; some of the class are only one three-thousandth of a line in extent; the largest do not exceed two-thirds of that area. The Ciliary process* is present in the smallest of these creatures, as well as in the larger animals and in man; and is, in the one as in the other, the agency through which are performed many of the most important functions of life. The digestive organs of the *Polygastria* are several connecting stomachs; the food is impelled towards the mouth by currents produced in the water by the motions of the cilia, and aëration is effected by the same means; reproduction takes place by means of spontaneous division, each part thrown off by the parent stem becoming a perfect body.† Some of the species are free in their movements throughout their existence, while others become fixed in a certain spot after they attain a degree of life; they never seem to rest, and present no decided nervous system, although the presence of a visual point would seem to indicate a nervous centre.

In the *Rotifera* the organs of digestion are less numerous and more fully developed, and reproduction is not accomplished or fissuration, for in this class some are oviparous, some viviparous; their motion is ciliary, and aëration results from the introduction of water through several neck apertures, as in some varieties of fishes. They possess indications of a nervous centre, and retain vitality for years, even when seemingly a mere dry dust. They suffer from sudden changes in temperature, although they exist in the extreme of heat or cold, if native to it.‡ Atmospheric air is necessary to their existence. Fresh water species die if sea water be suddenly poured upon them, but survive a gradual mixture; light is favourable, but not necessary to life, which endures from a few hours to three or four weeks. They decompose rapidly, and wholly disappear, save where they have siliceous cases, as in the species whose remains com-

* The Cilia are placed like hairs upon a round projection of the body, like a head, and have a rapid, vibratory motion, describing a circle, as in the wheel-animalcules; in some species of the *Polygastria* they are separate and independent, or scattered over the body.

† *Vide* Mantell on Animalcules, p. 77, and Professor Owen's Hunterian Lecture for 1843, p, 40.

‡ *Vide* experiments by Ehrenberg and Doyère.

pose the Bilin slate. They sometimes exist in interior portions of animal bodies, as the *trichina* in flesh, and the parasites in the blood of the frog and salmon; according to Nordmann, worms are sometimes found in the eyes of fishes which exist by suction.

The number of sea animalcules is immense, and of a character infinitely varied. Humboldt says of them, that the application of the microscope increases in the most striking manner our impressions of the rich luxuriance of animal life in the ocean, and reveals to the astonished senses a consciousness of the universality of life. In the oceanic depths, far exceeding the height of our loftiest mountain chains, every stratum of water is animated with polygastric sea-worms, cyclidiæ, and aphrydinæ. The waters swarm with countless hosts of small luminiferous animalcules, mammaria (of the order of acalephæ), crustacea, peridinea, and circling nereides, which, when attracted to the surface by peculiar meteorological conditions, convert every wave into a foaming band of flashing light. The abundance of these marine animalcules, and the animal matter yielded by their rapid decomposition, are so vast, that the sea-water itself becomes a nutrient fluid to many of the larger animals.*

In the polar regions, where fuller life can no longer exist, there is an uninterrupted development of the microscopic, which exhibits an abundance of unknown, and frequently most beautiful forms. Even in water from melted ice, obtained in the latitude 70° 10′, there were observed more than fifty varieties of *polygastria* and *coscinodiscæ*, with their green ovaries, which had thus proved their ability to resist the severity of the extreme cold.† The excess of ocean microscopics already known are siliceous, but the vast extent of water is instinct with life, which bears no mark of siliceous filaments.‡ On the earth vegetable life predominates, which seems, in a great degree, dependent upon light for its medium of existence, but the ocean midnights teem with animal beings, whose size falls below the thirty-sixth thousandth of an inch, but which are capable of reproducing their species at the rate of millions in a few weeks.

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* *Vide* Cosmos, vol. 1; Physical Geography.

† Capt. James Ross' Antarctic Expedition.

‡ *Vide* Ehrenberg's Treatise, *Ueber das kleinste Leben in Ocean*, read before the Academy of Science at Berlin, May 9, 1844.

These sea animalcules and algæ not only illuminate the surface of the water, but they also colour it in distinct hues. The observations of Ehrenberg, Dupont, and Montaigne, prove that the waters of the Red Sea are, at certain periods, coloured by the development of microscopic algæ; those of the genera *nostæ* exhibit such singular spontaneous movements, that it has been a mooted question whether they belong to the vegetable or the animal kingdom; they consist of a gelatinous mass, enclosing multitudes of short, rigid filaments, in colour dark or bright green, as in some Irish lakes, and brownish-red, as in the Red Sea. Ancient geographers attributed the colour of the latter waters to a peculiar reflection of light from the surrounding mountains; and also to the transparency of the waters, which renders visible the coral reefs below.

In 1854, M. Mollien observed that the Chinese Sea was coloured yellow and red in dispersed patches. The red colour was most frequent in that part of the sea south of the island of Formosa; the yellow to the north of that place. Specimens of this water, examined in France by M. Dareste, under the microscope, exhibited a deposit of a brown colour, composed of minute algæ, more or less decomposed.

The same author* records a curious description of a shower of sand, which fell at Shanghai in 1846. According to Mr. Piddington, Curator of the Museum of Economic Geology of India, it was of an olive-green colour, the grains adhering and mixed with hairy filaments, black, white, and brown, with a few reddish spicules, and grains of quartzose, transparent sand. By strong chemical test this dust was found to contain fine animal fibres, with a few grains of quartz, and impregnated with carbonate of soda; but the microscope revealed vegetable substance in the fibres, proving that they were confervæ. A close examination of the Sirocco dust, which fell at Genoa in the same year, contained two species of animalcules; one abundant in Africa, the other in South America. These infusorial, or dust-rains are of not infrequent occurrence; the most noted are specified by Ehrenberg in his essay on that subject.†

The red snow of Aristotle,‡ seen by him upon the mountains of Macedonia, was probably coloured by the microscopic

* M. Mollien. † "*Passat-Staub und Blut-regen.*"

‡ Aristotle, *Hist. Anim.* xxix., p. 552.

Discerea nivalis, which exists even in polar snows. A fall of red snow, which was observed in the Paster valley, in the Tyrol, in March, 1847, contained twenty-two species of infusoria, and an insect of considerable size, together with some thirty different organisms. Red hail was seen by Humboldt in Paramo, between Bogota and Papayan, at an altitude of fourteen thousand seven hundred feet. A red mist which began at Sacarno, near Lago Maggiore, on the morning of October 14, 1755, increased towards the afternoon to a heavy fall of red rain *(blut-regen)*, covering an area of forty square miles. At the same time a red snow-storm occurred on the Alps. In 1623, a shower of blood-rain fell at Strasburg, and in 1222 a similar phenomenon was noticed at Rome. Chrenberg records, in all, three hundred and forty showers of blood and dust rain; eighty-one of which fell before the Christian era, commencing with the plague of blood in Egypt, fourteen hundred and ninety-one B. C., and two hundred and fifty-nine A. C.*

The family of animalcules, named by Ehrenberg the *Diatomaceæ*, appearing wherever organic matter affords the necessary sustenance for the first degree of life, are instinct with motion, while their siliceous structure seems to ally them to the mineral world. The botanist refused them admission to his system on the ground of their non-possession of plant-like attributes, while the geologist readily placed them there. They are found in water, on the sea-shore, in the shallow pools at the deltas of rivers, and upon the stones in mountain streams. The hard and endurable nature of their cases renders them almost indestructible, and these appear where the living animal no longer exists. Vast geological tracts, formed of their remains, indicate that the sea once covered their area; they are found in Bohemia, Italy, Sweden, and the United States. The cities of Richmond and Petersburg, Virginia, are said to be built upon strata of this deposit eighteen feet thick.† There is also a bed of this siliceous earth, twenty feet deep, near Eusdorp, in Hanover.

Of like composition are the strata of white earth found in bogs and morasses, the bog-iron, and the Tripoli, or polishing slate of Bilin; the latter is fourteen feet in thickness, and one cubic inch contains forty-one hundred millions of these fossil animalcules.

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* Edin. Phil. Jour., 1852.

† *Vide* Smith's Synopsis of the British Diatomaceæ.

Ehrenberg discovered beneath the city of Berlin a bed of living animalcules from twenty to sixty feet deep, and lying but fifteen feet below the surface; two thirds of the mass is alive, apparently sustained by moisture, and, in one quarter of the city, the safety of the buildings is endangered by their existence. There is said to be a similar bed at Newcastle, in England. The *Berg-mehl* (mountain-meal) of San Fiora, in Tuscany, is of the same nature. Immense deposits of *berg-mehl*, shells mingled with a still remaining portion of animal matter, exist in Sweden and Norway; this meal is said to be nutritious, and, in times of scarcity of food, is sometimes mixed with flour into bread. The chalk beds containing the remains of gigantic saurians, and an endless number of fossil corals and muscles, are composed of microscopic *polythalamia*, whose species are still present in the Northern and Baltic Seas. Guano is largely composed of these fossil remains.

Microscropic vision has laid bare to us the interior cellular structure of plants incessantly agitated by manifold currents,* and gyratory movements, the phenomena of endosmosis, nutrition, and growth—in a word, the never-ceasing action of life. Cavanilles, a Spanish botanist, measured even the degrees of growth in a blade of grass by microscopic agency. All plants have an elementary cellulose tissue, existing either as membrane or fibre.† A beautiful combination tissue is that of the *sphagnum*, or bog-moss, which consists of a fibre coiled spirally within a cell. If a small portion of this membrane, which is highly gelatinous, be softened by the action of water, it will dissolve, releasing the imprisoned spires, which gradually and gracefully uncurl. Fibre is made up of tough transparent tubes, tapering at the ends; it is the chief constituent of wood, causing its close-

* The common pond-weed (*potamogeton*), and the arrow-head (*sagittaria sagittifolia*), afford beautiful examples of cellular circulation; but the most perfect medium for its observation is the German water-plant *vallisneria spiralis*, which grows under water, with long grass-like leaves and spiral stalks bearing female flowers, which float upon the surface. The male flowers, when about to open, separate themselves from the plant; and, as they rise to the surface, expand, and scatter their pollen over the female flowers. The leaves of this plant afford a beautiful microscopic view of the cellular circulation of vegetable organism.

† This marked difference between cellular tissue and woody fibre has been the means of determining to the cultivation of what natural production two ancient nations, separated by the breadth of the earth, chiefly devoted themselves; for the microscopic investigation of Egyptian mummy-cloths reveals the presence of flaxen fibre, while ancient Mexican specimens clearly show the elongated cells, or hairs, of cotton, which contract and twist in drying.

ness and hardness of grain. Some cells contain a woody or stony deposit, which grows with the cell, and eventually fills it, as the stones of various fruits. Another important deposit is the starch granule which plays a prime part in the nutrition of the plant that contains it, and of animals, when converted into food; as in the potato, the arrow-root, and the various grains. A very curious phenomenon in vegetable life is the presence of the needle-like crystals, or *raphides*, which exist in bulbous roots; a section cut from a hyacinth, lily, onion, or other liliaceous roots, will yield among its juice a number of these crystals. Fossil woods are interesting microscopic objects, for they prove the identity of the vernal vesture of the ancient earth with that most familiar to our eyes, showing that the same great classes still exist, although their peculiar species are no longer found upon the earth. The vegetable anatomy of mosses is comparatively little known, but very rich, on account of their general distribution over the face of the earth, and their position in important geological formations. Mosses and their congeners, lichens, fungi, and fuci, do not produce themselves by true seeds, as do the greater number of plants, but by minute cellular spores, as fine as dust, and generally quite invisible to the naked eye; the spores of ferns increase by sub-division.

The process of crystallization is revealed in all its beauty under the microscope; in salt, for instance, where the foundation can actually be observed;* and in alum, where the crystals are not less beautiful, but larger.

We shall not depart from our subject, if we consider briefly the crystalline formation, which is so general that it applies to the mass of labratorial substances; a careful study of its various appearances has produced a systematic classification. A superficial observation of the outward surface of the most of the minerals does not suggest any idea of a regular interior formation; but close investigation, even without the aid of a microscope, proves that they assume special conformations, according to the various distinct classes to which they belong. A body of smooth or irregular exterior, presents,

* Crystals of the most elegant configuration are seen actually forming beneath the eye, the point advancing with a steady motion across the field of view, while from its sides branches start off continually, often exhibiting a resemblance to the most graceful foliage, or, still more strictly, to the frost-flowers upon the windows in winter.—*Notcutt.*

when broken, an interior aggregation of crystals of various magnitudes, some so minute as to be invisible to the naked eye. These crystals are often imbedded in solid masses, or are found in what are called nests; these nests can be separated with greater facility in some directions than in others, and this fact furnishes lapidaries with a knowledge which they apply to the division of various precious stones. A formal change is sometimes caused by difference in temperature; thus, a formation contracted at a high or low temperature falls to dust in a different degree of heat or cold; still, this dust, under a strong magnifier, reveals minute crystals of the original form. One of the most beautiful chemical results is the formation of *murixide*, composed of minute crystals of metallic green reflection, and affording a deep red colour by transmitted light; their solution is reddish-purple, changing to an intense blue, when acted upon by potash, and decolourized by mineral acid, depositing a pale, yellow, crystalline powder.

In the present stage of human progress, the various departments of science are daily becoming more closely cemented together, and nowhere is this great truth more fully exemplified than in the region of Physics. One principle of development is common to all organized bodies; the elements of vegetable life may seem to differ from those of the animal existence, but, in reality, they resemble each other closely, however much the forms may be diversified. This principle has been applied to important pathological processes by Müller and Heule. As plants vary only in externals, so all vascular systems consist of cells more or less fully developed; animal forms are more complex, but broad as seems the distinction between the nervous and muscular systems and the cellular tissue, if we retrace their development back through its manifold changes, we shall arrive at last at the simple cell; and that, indeed, closely analogous to the vegetable cell. In the latter, reproduction takes place in the already existing cell; the parent cell is absorbed and gradually lost in the form of its offspring. In animals the same growth of a cell within a cell is proved by eminent physiologists. Fluid cells are of isolated existence, as the lymph globules, and blood and mucous corpuscles; and independent cells gradually become united in continuous tissues, until the horny tissues and the crystalline lens are formed; where the cell-walls have coalesced, cartilage, bone, and the ivory of the teeth occur.

Cellular, fibrous, and elastic tissues consist of fibre cells; muscles, nerves, and capillary vessels, are formed where both the cell-walls and cell-cavities have coalesced.

No scientific department has so highly profited by the use of the microscope as that of physiology; although the latter derived much assistance from chemistry;* particularly in the composition of remedies, and in the establishment of many important facts, it failed to supply those instruments for minute investigation which lay bare the secrets of organizations. With the microscopic examination of the structure of plants, and of the lower animals, began a system of enquiry which is daily producing the most valuable results in connection with the study of the human frame and its functions. Its minute processes have revealed the presence of disease in tissues, nerves, and secretions, and instituted a theory of diagnosis before unknown. Successful treatment of disease can be approached only by first obtaining an accurate knowledge of it, even in its most minute particulars. Professor Kölliker, in the preface to his admirable work on microscopic research, says: "Medicine has arrived at such a stage that microscopical anatomy appears to form its foundation as much as the anatomy of the organs and systems; and a thorough study of physiology and pathological anatomy is impossible without the exact knowledge of the most minute formal elements."

The microscope was first applied to medical science in the year 1628 by Marcellus Malpighi, but no material advance was made in this direction until 1801, when Bichat issued his important histological work, *Anatomie Générale*. In this production the various tissues are treated fully and in detail, and their functions and relations clearly defined. After the year 1830, a rapid succession of valuable discoveries established the science of histology on a firm and acknowledged basis. In 1838, Dr. Th. Schwann fully investigated and explained the cellular system, and the development of the chemical condition of the tissues. Although this cellulose basis is adopted as the first foundation of matter, Kölliker is of the opinion that some parts of the body, the fibrinous exudations,

* The search for information regarding the medicinal virtues of various substances led to the study of chemistry and botany, and these pursuits in their turn forwarded investigation into the composition of organic matter, and its relation to the vital forces. The earliest record of this investigation has been found among Hindu and Arabic nations, by whom chemical pharmacy was practised, and legitimate prescriptions for the proper use of drugs were issued at an early period of the world's history.

for instance, undergo transformation into permanent tissues, without the intermediate cellular formation.

Our knowledge of the circulation of the blood has been greatly extended by microsopic manipulation; the existence of the capillaries determined, and the ciliary motion detected in the cuticle and the systems of respiration, alimentation, and reproduction. The bone examined with its aid exhibits its inner structure of membrane, cell, and circulating vessels; the cartilage yields the secret of its growth, which is absorption, like that of the cellular vegetables; the teeth reveal their columnar crystals of enamel—three thousand of which lie in a cubic inch, but which present a surface so hard as to strike fire with steel—and the delicate thread-like nerves which afford life to the part; the muscular system, with its whip-like cords and its almost invisible fibres, proclaims the unswerving and unceasing action of vitality; the skin no longer withholds the mystery of colour and texture;* and the eyes, perhaps the most perfect and beautiful human mechanism, afford another source of wonder and admiration to the student of nature. The eyes of insects are often very large in proportion to their bodies, and are composed of an immense number of facets, each one of which is a perfect eye in itself; the eye of the dragon-fly contains twelve thousand of these facets, and that of the *Mordella*, a species of beetle, more than twenty-five thousand!

The microscope has substantiated some curious facts in connection with miasmatic diseases. Organic tissues, and the organic products of animal and vegetable life, are characterized by a tendency to rapid decomposition, or an undue development of one or more of the four constituents of all organic matter, viz., carbon, hydrogen, oxygen, and nitrogen. This decomposition is generally effected by a physical agent, as heat, light, or electricity. Observations by Lewy show that the quantity of oxygen varies perceptibly both over sea and land. "Changes in the oxygen held in solution in the sea, produced by microscopic animal organisms, may be attended by alterations in the strata of air immediately in contact with it. The admixture of carbonate of ammonia in the atmosphere may probably be considered as older than the existence of organic beings on the surface of the earth. The sources from which carbonic acid may be yield-

* A thin layer of the cuticle of the negro, examined microscopically, reveals the cells wherein are deposited the colouring matters which impart to it its dusky hue.

ed to the atmosphere are most numerous. In the first place we would mention the respiration of animals, who receive the carbon which they exhale from vegetable food, whilst vegetables inhale it from the atmosphere; in the next place, carbon is supplied from the interior of the earth, in the vicinity of exhausted volcanoes and thermal springs, from the decomposition of a small quantity of carburetted hydrogen gas in the atmosphere, and from the electric discharges from clouds, which are of such frequent occurrence within the tropics. Besides these substances which we have considered as appertaining to the atmosphere, at all heights that are accessible to us, there are others accidentally mixed with them, especially near the ground, which sometimes, in the form of miasmatic and gaseous contagia, exercise a noxious influence on animal organization. Their chemical nature has not yet been ascertained by analysis; but from the consideration of the processes of decay which are perpetually going on in the animal and vegetable substances, with which the surface of our planet is covered, and judging from the analogies deduced from the domain of pathology, we are led to infer the existence of such noxious local admixtures. Ammoniacal and other nitrogenous vapours, sulphuretted hydrogen gas, and compounds analogous to the polybasic ternary and quarternary combinations of the vegetable kingdom, may produce miasmata, which, under various forms, may generate ague and typhus fevers. Fogs, which have a peculiar smell at some seasons of the year, remind us of these accidental admixtures in the lower strata of the atmosphere. Winds, and currents of air caused by the heating of the ground, carry up to a considerable elevation even solid substances reduced to a fine powder. The dust which darkens the air for an extended area, and falls on the Cape Verde Islands, to which Darwin has drawn attention, contains, according to Chrenberg's discovery, a host of siliceous shelled infusoria."* An impure condition of the atmosphere, caused by meteoric dust, or sand showers, is said, by McGowan, to continue for two or three days at a time in some parts of China.

It is not a new speculation that infusorial life, existing in the atmosphere, does, under some circumstances, act as a poison when brought in contact with the interior membranes of the human body. Kirchner first propounded this opinion;

* Humboldt's Cosmos, vol. 1.

Linnæus sanctioned it, and also Nyander, who wrote at length upon this point. Sir Henry Holland, after citing proof in cases of the effect of animal poisons on the skin and cellular tissue from without, admits the fact that cutaneous diseases generally arise from parasitic life; and records the discovery of fungous sporules in the eruption caused by ringworm of the scalp. At a meeting of the Polytechnic Association of the American Institute, held early in November last, Dr. Van der Weyd reported that a European investigation had recently discovered the growth of minute mushrooms, or more properly, fungi, upon the tympanum of the ear; the gentleman then remarked the existence of *trichina*, and the parasite which causes the itch in the skin, and asserted the theory that the majority of diseases had a similar origin.* Dr. Henle, of Berlin, maintains the opinion that the material of contagious diseases is not merely organic, but matter possessing the condition of parasitic life as regards the bodies affected by it.†

Take, for instance, the epidemic of the Asiatic Cholera, which, appearing first on the Ganges, within a period of seventeen years spread itself over the entire earth. Irregular in time and mode of appearance, but everywhere leaving some connecting trace; everywhere identical in character, differing only in degree, preceded by no known physical or atmospheric change; without proof of production by any gaseous, mineral, or vegetable matter diffused through the air, for it prevails under widely different atmospheric and physical conditions; without one substantiated theory applying to habit, food, or temperament—for, bear in mind, it has only been in existence for a little over half a century—every hypothesis yet concerning it has been a negative one. May not invisible, animalcular life, diffused by contact or by transmission through the air, impalpable to our senses, yet capable of diffusion and propagation, act fatally on human life? "A migrating malaria, a wandering cause of disease," it must be produced by some agency capable of reproducing itself. What possesses that power save animal or vegetable life? The latter is, to a great extent, stationary, while the former is governed by no prescribed limit. It is true that, during the prevalence of the disease in Philadelphia, in 1832, and in Berlin, in 1848, a vegetable

* Report, published November 3, 1867.

† "*Von den Miasmen und Contagien*," 1840.

mould, of a bright red colour, tainted farinaceous food; but does this invariably occur when the disease exists?

Let us now, following Holland's hypothesis, trace the anomalies between the spreading of this contagion and some of the well-known movements of insect life. The disease appears, perhaps, in an insulated town or village, apparently apart from any connection with a previously affected locality, or, perhaps, in a crowded city; at first a few cases occur, generally fatal, then a wide and fearful prevalence of the contagion, for perhaps two or three weeks, and then a gradual decline. These conditions are far from incongruous with those of insect life, which suddenly appears and rapidly multiplies, and as suddenly disappears, sometimes by continuous flight, sometimes by unequal and broken progress. The disease sometimes stretches over considerable extents of country, but is more frequently confined to special localities; and occasionally prevails in the face of an opposing wind, which would be impossible to mere inorganic matter.*

ART. V.—1. *History of the Venetian Republic; her Rise, her Greatness, and her Civilization.* By W. CAREW HAZLITT, of the Inner Temple. 4 vols. 8vo. London, 1860.

2. *Histoire de la République de Venise.* Par P. DARU, de la Académie Française.

3. *Memorie Venete di* GIOVANNI GALLICIOLI, prete per la nuova Collegione di documenti per serivire alla storia Veneziana. Venezia.

4. *Raccolta Cronologico—ragionata di documentii nediti, che formano la storia diplomatica della revolutizione e caduta della Republica di Venezia*, corredata di critiche osservationi. 2 vols. 4to. Venezia.

A CURSORY glance at the history of nations which were once great but no longer exist, makes their destinies seem mysterious and inscrutable; but a careful and intelligent ex-

* "The Hessian fly, on its first appearance in America, early in the present century, afforded a singular example of this slow, progressive movement. The appearance and spread of the *Blatta orientalis*, in Northern Europe, is another similar fact. We are all familiar with the history, wonderful and incomprehensible though it be, of those vast swarms of insect life which suddenly appear at undefined periods of time, sweeping over wide tracts of country, and marking their course by the devastation they inflict. The locust swarms and migrations furnish the most remarkable example of this phenomenon."

amination shows that nothing of any moment has happened to them which was not the result of natural causes, or which might not have been foreseen by the statesman and the philosopher. Among all the nations of antiquity we do not find a single exception to this. There is not one whose fate had not been predicted in the midst of its prosperity and greatness by its calm and dispassionate thinkers. This is true alike of Egypt and Assyria, Tyre and Sidon, Greece and Rome.

But those who have either the courage or the foresight to warn their fellow-countrymen are always in the minority; if their voice is heard at all, it is only to be scoffed at, or their lives may be the penalty of their rashness. Even Pericles had but a narrow escape for warning the Athenians against making themselves the tools of demagogues, who, under pretence of protecting their liberties, would enslave them; although he had lain but a short time in his grave when his predictions were but too literally realized.

The fate of Athens itself does not teach us so instructive a lesson as that of Venice. Of all governments that have ever existed, the Venetian Republic affords the most striking illustrations of the influence of freedom and despotism on the character and destiny of the governed. As long as the Venetians enjoyed legitimate freedom they continued to increase n prosperity and civilization to an extent that made their condition the envy of all other nations; but the moment they were induced to surrender the last vestiges of their liberties to the representations of a designing oligarchy, their decline as a nation commenced. Gradually but steadily the glory of the Republic was turned into infamy; so that finally when their despotism came to an inglorious end, no true friend of liberty, humanity, or civilization regretted its fall. From one end of Europe to the other the sentiment of the poet was re-echoed:

> "Mourn not for Venice—let her rest
> In ruin 'mong those States unblest,
> Beneath whose gilded hoofs of pride
> Where'er they trampled freedom died."

That this should have been the destiny of a State that had once been so heroic, good, and great, and to which civilization owed so much, would be a painful reflection to the moralist as well as the philosopher did it not afford an illustration of retribution which cannot fail to serve sooner or later as a salutary warning to other nations. Thus far no re-

public has profited by the fate of Venice, with, perhaps, the sole exception of that of Switzerland. There are none, indeed, who have not heard of the Venetian Republic, but the almost universal impression is that it was always an oligarchy which had no just claim to the character of a republic. It is generally forgotten that it was once as free a republic as ever existed anywhere, and that it had flourished for nearly ten centuries before it came into the hands of the oligarchy, who rendered it an object of terror to its own citizens and of hatred and scorn to every enlightened nation. We shall see as we proceed that "Select Committees," invested with extraordinary powers for particular purposes, proved the ruin of Venice; thus it was that the famous, or rather infamous, Council of Ten was brought into existence, which only ended its oppressive and odious rule with the downfall of the Republic. Hence it is that none who have carefully studied the history of Venice have condemned Napoleon for having put an end to that despotism in 1796. A large proportion of the Venetians themselves were glad to see the end of a domination—

> "——subtle, invisible,
> And universal as the air they breathed;
> A power that never slumbered, never pardoned,
> All eye, all ear, nowhere and everywhere."

The great mistake is, that it was by tyranny of this kind the Tyre of the middle ages was enabled to conquer Constantinople, and to reign triumphant for centuries over Dalmatia, Cyprus, Candia, Corfu, and the Morea, as well as over that large tract of Italian territory extending from the Po to the Alps, and from the Adda to the Adriatic, the whole constituting about the three-eighth part of the Roman Empire. Let none believe that the Venetians were oppressed when they accomplished all this; on the contrary, they were the freest people of their time. And that they were an intelligent and orderly people, would have been sufficiently evident from the peaceful and thoughtful manner in which they conducted their elections. They were well acquainted with the ballot box; and no people used it more judiciously. This we shall see as we proceed; and if we do not learn a useful lesson from their ballot system, it is our own fault. The fact is, indeed, inconsistent with the theory that no people have ever exercised the elective franchise more thoughtfully than ourselves; but it is true, nevertheless.

Without giving the Venetians credit for so high an anti-

quity, or so glorious an origin as they claim for themselves—and their claims are supported by the most reliable of the ancient Roman historians*—all must admit that of all the moderns they were the first to form themselves into a regular society.† Venice owed its origin to a few fugitives, who sought shelter on the marshes and rocks of the Adriatic from the barbarities of the Goths. While Attila was spreading terror and ruin through northern Italy, these fugitives were quietly fortifying themselves on the small island of Rivus Altus, from which the celebrated bridge of the Rialto derives its name. It is certain that they had begun to prepare the way for their future greatness at the beginning of the fourth century. According to the most reliable authorities, they had a written democratic institution so early as 385 A. D.;‡ and the democracy established on this basis lasted for ten centuries, for it was not until the beginning of the fourteenth century that the government became an Aristocracy. Very soon after this change Venice began to decline; the government became gradually more and more oligarchial and tyrannical, until its iron rule was the byword of the world, and the terror of its own subjects.

The first inhabitants of the lagunes were governed by magistrates sent from Padua, which was also a Republic at this time (A. D. 420). M. Daru gives the names of these magistrates, and informs us that some of the principal Venetian families of the present day are descended from them.§ Padua continued to be the metropolis for about forty years (A. D. 460), until she was devastated by the incursions of the barbarians. Then the colonists had to take care of themselves; nor did they hesitate to establish a government of their own. They first adopted the tribunal system of the Romans; each of the little islands elected a tribune. These tribunes met together in the principal island, and formed themselves into a national council. For nearly fifty years this council constituted the whole government—legislative, executive, and judicial. Having been attacked by some of their neighbours, who had become rather jealous of their growing prosperity, the tribunes found it necessary to make a chief

* *Vide* Dion Cassius. *Hist. Romana*, lib. xxxix., p. 109 *et seq.* Livy, lib. i., § 1. Strabo, vol. i., p. 195. Cæsar, *De Bell. Gal.*, lib. iii., § 34.

† Nicolo Zano, *Cronica de cose dai Veneti dalla prima origine della Città.* Sagorinus, *Chronicon Venetum nunc*, primum editum, p. 9. *Cronaca Altinate*, lib. iii., p. 92.

‡ *Vite de Duchi*, p. 418 *et seq.* *Memorie Venete*, di Gallicioli, p. 24 *et seq.*

§ *Hist. de Venise*, Pièces Justif., sec. 6, vol. vii., p. 1.

of one of their number with the concurrence of the people (A D. 503). It was soon feared that this chief or consul had too much power; and in order to obviate danger, ten were elected the next year instead of one, and two more were added a year or two later, so that every measure of any importance to the miniature State had to be discussed and decided upon by a jury of twelve chosen men.

This system continued for two hundred years, during which period the Republic made remarkable progress in all that contributes to civilization. The people had become so prosperous, intelligent, and happy, that large numbers from other States were constantly joining them; and it is needless to observe that this proved a powerful element in the increasing importance of the State. At the same time its political system had its defects. For the first hundred and fifty years the tribunes and national council constituted a government that gave general satisfaction. The people in general were comfortable; and there were but few who had accumulated so much wealth as to give them any corrupt influence. But towards the close of the sixth century commerce had made such progress, that many of those who had hitherto been humble shopkeepers became merchant princes, and, as such, they were ambitious to influence the government. This they had not much difficulty in doing, as the politicians had become so degenerate that they were actuated much more by the love of salaries and "perquisites" than by patriotism. It is easy to understand how readily dissentions and jealousies were thus created. The neighbouring states—which were also small, chiefly republics—soon availed themselves of this state of things, as calculated to facilitate the designs which they had long entertained against a people whose wealth and prosperity excited their envy. Now that the Venetians were divided into several factions, which were as bitterly opposed to each other as if they belonged to different nations, there seemed to be little difficulty in subduing them. They were, accordingly, attacked at different points. But this had the effect of inducing the Venetians to compromise their differences, at least for the time.

All parties joined for the defence of the Republic, and the first result of this general harmony and co-operation was the election of Paululio Anafesto (A. D. 697), a citizen distinguished for his courage, patriotism, and integrity.* The

* Hist. de la Rep. de Venise, par M. Galibert, ch. iii., p. 20; Hazlitt vol. i., p. 80.

chief object in his election was to place him at the head of the army of the Republic, as he had received a military education, and had proved himself a skilful and successful commander in a former war. Hence the title of the new chief was *Dux* (leader or commander), which in the Venetian dialect became *Doge*. Nearly all the historians of Venice agree that it was for the express purpose of excluding all idea of sovereignty or kingship that this purely military title was conferred on Anafesto. Be this as it may, he fully justified the confidence reposed in him as a commander; in a short time he put the enemies of the Republic to flight. Some think that his election entitled him to preside at the deliberations of the Council of Forty; whereas others maintain that this power was not bestowed upon him until after he had made himself popular by his brilliant victories.

The early history of the Republic is so obscure that it is impossible to speak positively on this subject without incurring the charge of recklessness; all that can be said, without going beyond the bounds of historic accuracy, is that whatever was the original design in his election, the Doge took a decided part in the administration of the government as soon as peace was restored. He became so popular that the National Council three times increased his powers and prerogatives, until finally it may be doubted whether any of the royal or imperial sovereigns of his time possessed more power over his own people.

All agree that Anafesto did not in any manner abuse his power. Yet there can be nō question that the representative body was wrong in establishing such a precedent. The next Doge naturally expected to possess the same powers as his predecessor; nor was it deemed judicious to withhold them from him. It seems that he, too, exercised his powers only for the good of the State. Yet he was suspected and feared; strong jealousies were entertained against him by the National Council; but if he did not do much service to the State, he at least did not do it any harm. His successor was no ordinary man; he proved both a warrior and a statesman. He made war against the Lombards, the most powerful people of their time; he besieged them at Ravenna, which they had wrested from the Emperor of the East, reconquered the city and restored it to the Emperor, who as a reward for so much heroism and

sense of right granted to the Republic a large tract of land bordering on the Adriatic and extending to the Adige.

For the three hundred years the Republic had now been in existence, no individual had added so much to its territory, or contributed so much to its glory, as the Doge Orso; but his reward was assassination (A.D. 737).* He was murdered in his palace for no other reason than that so great a general might do mischief, if he were not put out of the way. The deed was committed by the populace, but the real authors of it were the dominant faction in the Council of Forty, who thought that he stood too much in the way of their own ambition, and therefore excited the mob against him. In order to make it appear that they were actuated by patriotic motives, they passed a law that the Republic should be no longer endangered by a similar ruler, but that the chief magistrate should in future be elected yearly. The new functionary was styled *Maestro della Milizia;* he had but little power, and it does not appear that he did either good or harm. His successor was no better than he; indeed, so carefully was his power circumscribed, that even if his abilities had been of the highest order, it was impossible for him to exercise them to any considerable extent without being guilty of high treason. This the Council of Forty was forced to admit, and they passed a law increasing the powers and privileges of the Maestro della Milizia, but still requiring that he should only continue one year in office. The fifth of those annual magistrates was accused of having abused his increased powers, and he was not only deposed, but his eyes were put out (A. D. 742).

It is worthy of remark that the unhappy person who was thus dealt with was the chief of the faction in the Council of Forty who had incited the populace to murder the conqueror of the Lombards. It was almost universally admitted, not only that the former had deserved the punishment he received, but that the annual magistrates were much more dangerous and less useful to the Republic than the Doges; and accordingly a law was enacted restoring the latter. What the power of the Doges was at this time we learn from one of themselves. Donaldo, one of the earliest and most reliable of Venetian historians, informs us that "the Doges were invested with power of convoking assemblies; of declaring war, or concluding treaties; of com-

* Harl. Mss., No. 4,820.

manding the armies of the state; of appointing the military tribunes and the judges; of hearing appeals, and deciding definitively on all matters at issue; of collecting the citizens in their different islands, and in the quarters or districts of Venice, for the purpose of choosing their parish priests and bishops; of judging all matters concerning the clergy, in causes as well civil as criminal, leaving to the Pope the decision of such only as were purely spiritual; lastly, of awarding ecclesiastical punishments, investing the bishops, and installing them in their churches."*

If this is to be accepted as correct, it must be admitted that no sovereign of the middle ages, or indeed of any age, had more power than the Doge. But nearly all the historians inform us that it was those who had most power that did most good. The Council of Forty must have been of the same opinion, since they restored the doges after a trial of five annual magistrates, the last of whom was punished as we have seen. But the power of the doges was greatly modified from time to time, according to the caprice of the Council of Forty, who frequently deprived them of all power; so that the Doge has been described a king in purple, senator in the senate house, a prisoner in the city, and a mere private individual out of the city.†

That his position was not a very agreeable one may easily be inferred from almost any part of the history of Venice. Thus it appears that of forty-three who reigned in the course of three centuries, five were compelled to abdicate, three were assassinated by conspirators, nine were deposed by the senate, and deprived of sight or sent into exile, and one was sentenced to death by the same body for no graver crime than that he had become obnoxious to the dominant faction. It is not difficult to understand from this that the Doges frequently wished to resign, and that many citizens refused to accept the office. But in time it was made a "high crime and misdemeanor" to do one or the other. The government had, however, existed six centuries before the power of the Doge was seriously limited.

For nearly two centuries the Doges were allowed the privilege of associating their sons with them in the government; but at the beginning of the eleventh century this habit ceased. In 1832 Flabenico had to disclaim for himself and his successors

* Dandolo, apud Gallicioli Chron.—Daru, Hist., vol. i., p. 42.
† Rex in purpurâ, senator in curia, in urbe captivus, extra urbem privatus.

all right to associate any one in the government without the express permission of the Council of Forty. From this time forth the power of the Doge diminished from year to year, and it is worthy of remark that the power of the people diminished in an equal ratio. But there was this difference: while the Doges continued to form at least a nominal part of the Republic as long as it existed, the people ceased to have any more voice in the government than the subjects of the most despotic sovereign in the world.

What seems most incredible is, that it was the body corresponding with the British House of Commons and the American House of Representatives, called the Great Council, which thus gradually and insidiously destroyed the liberties of the people. This body was established in 1172; it consisted of 480 citizens equally selected from the six districts of the city, and annually renewed. The mode of their election was indirect. First the people elected two tribunes in each district, and the tribunes nominated the members of the Grand Council. The latter, like most other bodies, did very well for a time. They were empowered by law to appoint the Doge; they had several other powers and privileges which they did not like to risk by depending on the voice of the people, and accordingly they soon declared themselves the fountain of all power. To prepare the way for this they passed a law declaring their right to name the tribunes, who were to appoint their successors; they also claimed the right of confirming or rejecting their successors before resigning their functions; so that the annual elections henceforth were but a farce. Of course there was no use in nominating any whom they did not approve; and if the tribunes did not nominate themselves they were liable to dismissal. After a few years the tribunes were set aside altogether as a useless body; then the people had not even the name of exercising the franchise. The Great Council entered into a compact with the Council of Forty, which was declared to be the substitute of the tribunes. The course of the Forty was to ballot on the names of the members who already belonged to that body, and whoever obtained twelve white balls was allowed to retain his seat; any additional members required on account of death or rejection were selected by three electors appointed, not by the people, but by the Grand Council. The next step was to exclude from the Grand Council the representatives from the other cities of the Republic.

A small minority of the Great Council made some objection to this; but they were men who had some property on the mainland, and the result of their objections was, that a law was passed excluding from the Great Council all who owned lands on any part of the continent. This caused several expulsions; and when it was thought that the Great Council was properly constituted, another law was enacted which declared that all who did not belong to that body during the past year or the four preceding years, were for ever excluded from it, and not themselves only but also their descendants. This curious law was passed in the eighth year of the reign of Pietro Gradinico, and is known in Venetian history as *La Serrar del Consiglio.* In one year after the promulgation of this decree (1319), elections of all kinds beyond the precincts of the hall of the Grand Council were declared abolished; and it was enacted that the son of every member whose father was dead, might take his seat in the Grand Council as soon as he attained the age of twenty-five. Those whose fathers died before they attained that age, were entitled to call for a ballot, if twenty or more; and, by this means, some thirty young men belonging to the nobility were annually added to the Grand Council. In order to reconcile the people to the loss of their political rights, theatres were established, to which they had free admission twice, three times, and sometimes four times a week; they had also free admission to concerts and several other kinds of amusement. Some families who were respectable, sufficiently so to belong to any branch of the Government, were allowed the privilege of dining annually with the Doge and shaking his hand; others had the privilege of receiving similar attentions from the supreme judges, &c.

The inhabitants of the larger islands were entitled to an annual visit from the Doge, accompanied by a deputation from the Great Council. This was made the occasion of a general carouse. Sometimes considerable sums of money were distributed among the crowd, on most occasions they were treated to magnificent suppers; so that the multitude were easily enough persuaded that it was as well for them to be enabled to enjoy themselves thus heartily from time to time as to spend their time at elections, which in the end would have been as much controlled by the rich as if the poor had not voted at all.

Besides the Great Council and the Council of Forty, several other bodies were established in the thirteenth century, but

they all owed their existence to the former body; all were chosen by it, generally from its own body. The Senate formed a sort of intermediate body between the nobles and the executive, but its power was little more than nominal. Its chief duty was to ratify the laws passed by the Great Council; but if any of its members refused to do this, or caused any disturbance by finding fault, they were liable to be cast into prison at any moment; and those who were imprisoned were seldom seen afterwards. There were also the Forty Judges, and the College of Wisemen or *Savi;* but both were completely under the control of the hereditary legislators. The Judges might administer justice as they thought proper, as long as their judgments did not come in collision with the prerogatives of the Great Council; but this occurred whenever they attempted to punish any relatives of the councillors. No case could be brought before the Senate without being introduced by the College of Wisemen, which consisted of the Doge, the three chief judges of the criminal tribunal, and sixteen *Savi.* Six of the latter had the chief control, although the Doge was nominally the head of the College.

But the most despotic body of all was the Council of Ten. Our readers would do well to note how this originated. Although the people allowed themselves to be cajoled out of their liberties, they soon learned from experience that a great wrong had been done them. They made several attempts to recover their lost rights; but they were immediately put down by the foreign troops maintained by their masters for that purpose. Large numbers of citizens were thus slaughtered; others were secretly arrested, tried, and executed; and the survivors were more oppressed than ever. During one of these insurrections (1310), a commission of ten members of the Great Council was appointed for the purpose of investigating the affair, and bringing the conspirators to justice. First, they were appointed only for fourteen days; but they did so well during this time—put so many to death in various ways, and under various pretexts—that their time was extended to forty days. Even then the good work in which they were engaged was not half done, although they acted with abundant zeal and energy; accordingly, the Great Council voted, by a large majority, that they might take as much time as they wanted; and thus they continued to strike terror into all who dared to find fault with the hereditary legislators, until at length (A. D. 1335) their tribunal was declared perpetual.

It is well to bear in mind that the English and other monarchical historians of Venice have, in nine cases out of ten, sought to misrepresent the democratic system under which the Republic flourished for more than six centuries; and to extenuate, if not justify, the oppressive and tyrannical rule of the oligarchy, which, as we have seen, reduced the people to a state bordering on slavery. The most impartial of those historians is Hallam; but even he is rather favourable to the aristocracy, although he admits that the Council of Ten can hardly be regarded as a model in free States:

"This most remarkable part of the Venetian constitution consisted, in fact, of seventeen; comprising the Seignory, or the Doge and his six councillors, as well as the Ten, properly so called. They had by usage, if not by right, a controlling and dictatorial power over the Senate and other magistrates; rescinding their decisions, and sometimes treating separately with foreign princes. Their vast influence strengthened the executive government, of which they formed a part, and gave a vigor to its movements which the jealousy of the councils would possibly have impeded. But they are chiefly known as an arbitrary and inquisitorial tribunal, the standing tyranny of Venice. Excluding the old Council of Forty, not only from the investigation of treasonable charges, but of several other crimes of magnitude, they inquired, they judged, they punished, according to what they called reason of state. The public never penetrated the mystery of their proceedings; the accused was sometimes not heard, and never confronted with witnesses; the condemnation was secret as the inquiry; and the punishment undivulged, like both! The horrible and odious machinery of a police, the insidious spy, the stipendiary informer, unknown to the carelessness of feudal governments, found their natural soil in the Republic of Venice."—*Middle Ages*, by Henry Hallam, vol. i., p. 162.

Other English historians speak of those who deprived the citizens of all representation, as "Reformers." This is true, for example, of Mr. W. Carew Hazlitt, the most recent of all. Speaking of the privileges of the patricians, this gentleman tells us that "with all these advantages, and they were certainly great, the nobility felt that as a body *they had just reason to be dissatisfied* with the position which they occupied in society; and there were two great *constitutional abuses* which combined to produce this sentiment. The first was the *principle of Universal Suffrage*."*

Further on Mr. Hazlitt speaks of the inconveniences and dangers of the Democratic system. "This condition of affairs," he adds, "was undoubtedly pregnant with evil; and it was such *evil* for which the advocates of *reform* were now anxious to provide an early and efficacious remedy."† It was not at all their own aggrandisement the oligarchy sought;

* Hist. Venetian Republic, vol. i., p. 388. † Ibid., p. 389.

they deprived the people of their rights, only because they were no use to them—nay, because they did them harm! And it was the same patriotic and disinterested motive that prompted them to reduce the Doge to the position of a mere puppet. "A second point," says the new historian of Venice, "which bred bitter complaint among the upper class, was the extensive power which was lodged by the ducal prerogative in the hands of their chief magistrate, and which though certainly abridged to a considerable extent by the law of Flabenigo, was still too ample and concentric to find favor in the eyes of a proud and jealous aristocracy."*

It was perfectly right, therefore, according to Mr. Hazlitt, to chain the Doge as well as the people. He tells us that the labours of the "Reformers" were finished in 1172, and that "they resulted, as might have been foreseen perhaps in some quarters, in an entire *reconstruction of the legislature* and the introduction of several important changes into the Executive."† In the first place, the "pernicious system" of universal suffrage was abolished for ever. Thus the more power the oligarchy had to themselves, and the less opposition they had to encounter, the more complete was the reform! But the Venetian historians take a very different view of the case, especially those of the first rank; and the same is true of the French and German historians. The most reliable of all is M. Daru; no one has more fully investigated the whole subject than he; if, indeed, any other historian, native or foreign, has prepared himself so well for the task of writing the history of Venice. Be this as it may, it is certain that no other historian had such ample opportunities to ascertain the truth as far as it was possible to do so after the lapse of so many centuries. M. Daru had access to all the manuscripts, as well as printed documents secured by the French on the occupation of Venice at her downfall, in which were included many of the secret statutes of the oligarchy, and he was allowed similar privileges by the Austrian government. And what is the record that he presents us? It will be seen that a more atrocious government could not have existed anywhere than that initiated by Mr. Hazlitt's "Reformers." M. Daru has brought to light several of the statutes of the Council of Ten, and has proved them to be correct copies. But before we give any specimens of these, let us glance at M. Daru's account of the circumstances which rendered such statutes possible.

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* Hazlitt, vol. i., p. 390. † Ibid.

After the oligarchy had completed their new constitution they elected a Doge; but he was called upon to agree to the following conditions: That in future the people should have no voice in the election of the Doge. That the Doge should henceforth have no power *to choose his own counsellors*, but that six individuals should be associated with him, who should form an integral part of the supreme magistracy, and without whose concurrence none of his decrees should be valid. That whenever he might require a larger number of counsellors he should not, as formerly, call in the assistance of those citizens whom he thought most capable of advising him, but should consult the Forty, to whom were to be added sixty other individuals from the Great Council. That *the people should no longer hold meetings*, but should delegate the exercise of all their rights to 480 citizens (the Great Council, or hereditary legislators), from whom should emanate every act relating to the sovereignty, &c.

It should be mentioned to the honour of the Doge who was elected under these conditions, that he refused to accept the office. The first Doge under the new constitution was Sebastiano Ziani (1173). He had always been in favour of disfranchising the people, believing that they should have no hand, directly or indirectly, in the government; and as his sentiments were well known he was by no means popular. But Ziani was at once wealthy and shrewd. The moment he received intimation that he was to be placed on the ducal throne, he had his name stamped on a large amount of gold and silver, which he threw to the crowds that rushed to see what the new Doge had to say. This had the desired effect; Ziani was carried in procession through the city amid the acclamations of the disfranchised people, and seated on a throne prepared for the occasion.

The enemies of republican government maintain that because Venice flourished for some time after this, her decline and fall must not be attributed to the change, forgetting that in this as well as in many other respects a state is very much like an individual, who on account of some important changes in his habits of life may contract a disease which, although it may continue latent for some time, is sure to kill him ultimately. It should be borne in mind besides that there was no real tyranny for long after this. Those used to freedom for centuries will not submit to be chained down at once; their fetters must be put on gradually.

But to return to the Council of Ten, which, as already remarked, was originated A. D. 1310. One of its first acts was to render it a capital crime on the part of a Venetian to enter into the service of any foreign prince, and to confiscate the property of those who withdrew their allegiance from the Republic. The reason of these laws is sufficiently obvious, if indeed such tyrannical edicts can be said to have any reason in them. Many of the citizens who were not fortunate enough to belong to the privileged class, soon learned that they had no great inducement to remain in Venice; large numbers withdrew accordingly; and in order to put an end to an emigration which could not fail to prove the ruin of the Republic, the oppressed were obliged to suffer on, or subject themselves to still worse evils.

Yet the treatment which the Venetians received was mild and gentle compared to that to which the colonies and provinces of the Republic were subjected. This will be sufficiently understood from a specimen or two of the maxims of the celebrated Fra Paolo, drawn up by request of the Council of Ten, for their guidance. Speaking of the people of the colonies who evince any longing for liberty, he says that they should be treated like ferocious beasts; that they should be fed on dry bread, scourged, &c.* The rebels in the provinces, or those who are not willing to be "reconstructed" according to the reformed plan, are to be treated somewhat differently; they are to be disposed of on a larger scale; whole cities are to be deprived of their municipal privileges; their inhabitants are to be so impoverished that they must sell their goods, and so give the Venetians an opportunity of making cheap purchases which will increase their wealth. If certain members of the municipal councils prove inconveniently bold, or too much devoted to the people, they must be gained over at any price. If this cannot be done, they must be exterminated under one pretext or other, but the ordinary forms of justice must be dispensed with. Poison may be made to perform the work of the hangman, &c.†

* Il faut les traites comme des animaux féroces, les rogner les dents, et les griffes, les humilier souvent, surtout leur oter les occasions de s'aguerrir. Du pain et le bâton, voilà ce qu'il leur faut; gardons l'humanité pour une meilure occasion."

† Tendre à dépouiller les villes de leurs privileges, faire que les habitans s'apauvrissent, et que leurs biens soient achetés par les Vénetiens. Ceux qui, dans les conseils municipaux, ce montreront ou plus audacieux ou plus dévoués aux interêts de la population, il faut les perdre on les gagner à quelque prix que ce soit: *enfin, s'il se trouve dans les provinces quelques chefs de parti, il faut les exterminer sous un prétecte quelconque, mais en évitant de recourir à la justice ordinaire. Que le poison fasse l'office de bourreau, cela est moins odieux et beaucoup plus profitable.*"

It seems difficult to believe that any government would act on such atrocious precepts as these, but there can be no question that they were literally enforced by the Council of Ten. Many cases might be adduced in proof of the fact, but one or two will suffice. The course pursued towards Novello de Carrara, Prince of Padua, is but too well known, for it has afforded several poets subjects for tragedies. For many years Carrara maintained a war against the superior power of Venice with distinguished heroism and ability. After enduring a long siege he was finally forced to surrender, in order to save the city and its inhabitants from destruction. The Venetian *Proveditori*, who always attended the armies of the Republic to watch the movements of the generals, and report any want of zeal or lack of courage which they might evince in their campaigns, declared to the Prince that they had no power to treat with him; they informed him that his best course was to deliver the keys of the city into their hands, and then go and negotiate in person with the Senate. Relying on their assurances, and a safe conduct which they furnished him, he at once embarked for Venice, taking one of his sons with him. In due time they were admitted to an audience of the Senate, when they threw themselves on their knees, and entreated the mercy of the Republic. The Doge, raising them encouragingly, placed one on each side of him, and reminded them, but without bitterness, of the benefits which his predecessors had conferred on their house, and of the ungrateful return which they made. The ingratitude of the Prince simply consisted in his having attempted to render himself and his people independent of Venice. His only reply, however, was to implore the clemency of the Senate, for he well knew what a cruel enemy he had to deal with.

Both the Doge and the Senate had no other idea than to treat the Prince and his son as prisoners of war. With this view they appointed a commission to determine the place of their confinement. But the Council of Ten took the case into their own hands, maintaining that, for enemies so dangerous by their talents and valour, the only safe prison was the tomb. When the father and son were brought to their dungeon, they were permitted to see another member of their family—Francesco's eldest son, of whose fate they had hitherto been ignorant since his arrest.

After remaining some days in this miserable abode, the Prince was suddenly called upon to prepare for death. A

priest came to give him the consolation of religion; having confessed him, he was called upon to withdraw. He had scarcely left when two of the Council of Ten entered the dungeon, accompanied by their executioners. Novello determined, with characteristic bravery, to sell his life as dearly as possible, seized a wooden stool, the only article of furniture in his dungeon, and rushed upon his murderers. After a desperate struggle he was overpowered, and strangled with the strings of a cross-bow. The two sons knew nothing of this, but they were put to death themselves next day.*

But it was not alone those prisoners of war who might do them mischief at a future day† they put to death in this way; they often pursued the same course towards the commanders of the forces of the Republic. Francesco Carmagnolia was one of the greatest captains of the middle ages. Not only had he gained many brilliant victories for the Republic, but added to her territories the finest plains of Lombardy. But because he could not always defeat those who disputed the rule of Venice, his fate was sealed, on the ground that he was not faithful to the Republic. He was invited to the capital to confer with the Senate on the restoration of peace. Although well aware of the unscrupulous character of those he had to deal with, he did not hesitate to obey, because he knew he had done his duty. Lest he might apprehend danger, arrangements were made to do him honour along the whole route. On reaching Venice he was introduced into the ducal palace, but his attendants were advised to retire, as he would have to dine with the Doge (Foscari) and also have an interview with the Senate. This seemed natural enough, and he made no objection; but he soon observed that every door he passed was carefully closed. When found inside he was told that the Doge was indisposed and could not see him. A door that communicated with the secret dungeons was opened; he objected that it was not the right way, that he had come in by a different door; but the officers insisted that it was the right door, at the same time seizing him and dragging him in, he exclaiming that he was lost. As there were so many who saw him enter it would not do to dispatch him in the usual way, with poison or the rope. There being no proof that he had been in any manner unfaithful to

* Chroniche Veneziane, p. 393. Harl. MSS., No. 5020. Hazlitt's Hist., vol. iii., ch. xxi.

† See Daru, vol. ii., p. 11.

his trust, he was put to the torture; it was in vain he pointed out the wounds he had received in the service of the Republic, and showed how much they aggravated the sufferings inflicted on him to force him to confess that he was guilty. Finally his tormentors proclaimed that he made such a confession, and in order to prevent him from denying it, or from exposing the atrocious conduct of the Council of Ten, he was conveyed to the place of execution with a gag in his mouth, May 3, 1432.*

The true cause of the fate of Carmagnolia was his fame and popularity as a general. The Doge was so much disgusted at the bloodthirsty conduct of the Inquisitors that he offered to resign, but was not permitted. Tyrants are generally timid, as well as jealous; the Council of Ten feared that Carmagnolia, although not a Venetian but a Piedmontese, might one day restore the popular government, and become its head himself. But, in order to understand this, it is necessary to bear in mind the treatment received by such of the Doges as seemed to have any sympathy for the people, or to whom any popular favour was evinced. No matter what service they did for the Republic, they were persecuted or put to death—often both; or if they could not with any semblance of justice be imprisoned, exiled, or put to death themselves, their sons or their near relatives were persecuted in their stead. The case of Francesco Foscari will serve as an illustration of this. The conquests of this Doge excited admiration throughout Europe; the Venetian people were dazzled with the splendour of his reputation. Whenever he appeared in public he was enthusiastically cheered; but no greater injury could have been done him. It was impossible to find any plausible pretext for attacking the Doge himself; but the Council wreaked its vengeance on his only son, Jacopo. He had previously lost three sons; this made him the more tenderly attached to the surviving one. But the latter was seized (1445) on the charge of having received presents of jewels from the Duke of Milan contrary to law, and dragged before the Council of Ten; his father was obliged to preside and witness the cruel tortures which forced him to admit having received the presents, and then to pronounce sentence of perpetual banishment upon him.†

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* Hist. Veneta Secreta, p. 172. Chroniche Veneziane, p. 426. Hazlitt, vol. iv., ch. xxiii.

† "The Dogeressa, his mother, petitioned the Council of Ten, through the Doge, to be allowed to proceed to Trieste to take a last farewell of her child, but was refused."—*Hazlitt's Venice*, vol. iv., p. 202.

After he had wandered in exile for five years one of the Council was assassinated. For no better reason than that Jacopo had cause to detest the oppressors of himself and his father, he was suspected of the murder. He was seized at Treviso by the secret emissaries of the Republic and brought to the capital. Again he was subjected to the most frightful torture, which his unhappy father was compelled to witness. No evidence could be adduced to show that Jacopo had any hand in the murder; nor could any amount of torture force him to admit that he knew anything of it. He was again sentenced to banishment, however; the place of his new exile was one of the most distant of the colonies. He was not long in his new abode of misery when the real assassin confessed in his dying hour that it was he who did the deed. But this did Jacopo no good, although he implored to be allowed at least to visit his aged father and his wife. Finding all hope in vain, he wrote to the Duke of Milan begging him to intercede with the Senate in his behalf. This was "a high crime and misdemeanor" in itself, and accordingly Jacopo was seized once more and brought a prisoner to Venice. For the third time he was tortured before the eyes of his father; it was in vain he declared that he wrote the letter in despair, hoping that at the worst it would enable him to get a last sight of his aged parents and of his wife, who was prevented from sharing his exile.* Again he was sent into exile with his joints almost dislocated by the cruel torture to which he was subjected; but this time he had scarcely arrived at his destination when death put an end to his sufferings.

Twice his wretched father begged to abdicate a dignity which had been the cause of so much misery to himself and his family; but the Council of Ten refused to gratify him thus far, still waiting for an opportunity to satiate their hatred. He was eighty-six years of age when he heard of the death of Jacopo; his grief was so great that he was no longer capa-

* Even Hazlitt, who is everywhere the apologist and champion of the Council of Ten, is obliged to admit that the last meeting between the wretched Jacopo and his still more wretched family, was heart-rending. "The agonized countenances," he says, "the tears, the sobs, were absolutely melting; and the final meeting between the two Foscari is described by Giorgio Dolfino, a kinsman of his family and an eye-witness, as having been sublimely pathetic. 'Father,' cried Jacopo, 'I beseech thee to procure me leave to return to my house!' 'Jacopo,' rejoined the other, 'go, obey the will of the country (*La Terra*), and seek nothing beyond.' But the painful exertion which it had cost the old Doge to command his feelings had a quick reaction."—*History of Venice*, vol. iv., p. 219.

ble of discharging the vain ceremonial of his office. While thus tottering on the brink of the grave, Jacopo Loredano, one of his bitterest enemies, who was now a member of the Council of Ten, proposed that he should be deposed, as no longer capable of performing his duties. The heart-broken old man protested that it was contrary to the Constitution to depose him merely for being old and infirm; but in vain. He was ordered to retire privately from the palace; but he insisted on quitting it publicly by the great staircase on which he had been solemnly installed thirty-four years before. Leaning on his staff the old man descended from the palace, while the multitude shed tears at their inability to save him from such humiliation, overawed as they were by mercenary troops that only waited for the signal to slaughter them. The old man had scarcely reached his residence when the bell of St. Mark announced by a merry peal the election of his successor. But he was unequal to the shock which this gave him; the agitation produced the rupture of a blood-vessel, which caused his death almost instantaneously.* It is not strange that the people mourned his death; and perhaps it is still less strange from the facts already stated that a decree of the Council of Ten forbade them, on pain of death, from speaking in public or private of either of the two Foscari.†

Such were the Venetian Radicals of the fifteenth century; but they had not yet brought their system to perfection. They thought the enemies of the Republic were still too leniently dealt with; and that accordingly there was too much "disloyalty." The Council of Ten pledged their "sacred honour" to exterminate the disloyal. But how was this to be done? They could not admit into their tribunal persons who might betray them; the Council was too large already, but it would not be just to diminish it, since all the members had done their duty so well. Finally it was agreed upon to appoint three members of the Council, Inquisitors of State (1544). The power of these Inquisitors was to be supreme; and they were to render no account whatever of

* When the death of the Doge was announced the Council of Ten made arrangements to honour him with the usual rites of sepulture. His wife (the Dogaressa Nani) objected that "it was a tardy atonement for passed wrongs," &c.; but what the Council of Ten willed should be done. The corpse of Foscari was seized and enveloped in the ducal robes on which he had conferred so much lustre and glory in his life, but of which he had been stripped only a few days previously, for the crime of having grown old and feeble in the service of the Republic!—*Hazlitt*, vol. c., xxiv.

† Memorie Veneti, p. 420.

their doings. All their functions were to be performed in secret; their jurisdiction embraced all ranks and condition, including the Doge, the Senate, the ecclesiastics of all grades, not excepting the Pope's nuncio. To none but the Council of Ten was any of these Inquisitors known; neither prisoners nor witnesses were ever permitted to see them. No summons which they issued bore their own names, but that of the President of the Council of Ten.

Torture was the means which they chiefly relied upon to elicit information; and after the victim was forced to give evidence against himself, the Inquisitors were empowered to execute him at night and in private, the general mode of death being drowning in the Canal of Orfano. Another decree provided that if any one, whether noble, ecclesiastic, or plebeian, presumed to make comment on what was done in this way, he should be warned twice, and then if he persisted drowned as incorrigible.* M. Daru was the first who brought to light some of the atrocious statutes which authorized laws of this kind, and he has fully proved them to be authentic. Mr. Hazlitt and certain other admirers of the oligarchical system declare that those statutes are spurious, for no better reason thanth at they know nothing about them. They make no allowance for the superior learning, peculiar advantages, and indefatigable research of M. Daru. But although they reject the statutes, all record atrocities which illustrate even the worst of those statutes. There is no instance of tyranny, however cruel or base, alluded to by us in this paper which is not recorded even by Mr. Hazlitt; but he always tries to show that the Council of Ten and the Inquisitors of State were actuated by the noblest motives, just as some other writers are trying to show at the present moment how noble and grand are the motives of a certain other Council which is also destined to attain a certain kind of fame. In summing up the evidence of the genuineness of the "reconstruction" statutes of the Council of Ten, collected from various sources, he makes the following remarks, which we prefer to give in his own language:

"Dans les recueils de la corrèspondance de la légation de France à Venise, existans aux archives des Affaires Etrangères, on trouve de temps en temps, parmi les pièces envoyées par les ambassadeurs, des extraits du

* One of the articles of this decree reads as follows:

"Le patricien qui se permettait le moindre propos contre le gouvernement, était admonété deux fois, et à la troisième *noyé comme incorrigible.*"—(Art. 39.)

réglement de l'inquisition d'état. Ces extraits sont fort incomplets, mais, dans ce qu'ils contiennent, ils sont conformés aux statuts que nous publions. Tous ces extraits, toutes ces copies ont déjà plus d'un siècle d'existence; et cette conformité entre des copies qui n'ont pu être faites l'une sur l'autre, entre les citations du cavalier Soranzo et les extraits envoyés en divers temps par nos ambassadeurs, paraît démontrer l'authenticité de ces statuts."—*Hist. de la Republique de Venise*, vol. vi., p. 387.

Among these statutes was one which declared that there was no asylum in Venice for those suspected of being "disloyal." Neither priest, bishop, nor cardinal could save them from assassination even before the altar. If one, believed to sympathize with the inhabitants of the disfranchised cities or provinces of the Republic, sought refuge in the palace of an ambassador under circumstances that rendered it imprudent to arrest him, means were to be taken to stab or poison him. The ambassadors themselves were constantly watched; at least four spies were maintained about the residence of each; and these were instructed to procure all the information in their power from those in the service of the ambassador, freely bribing them when necessary. No Venetian could let a house to an ambassador, or to the Pope's nuncio, without permission from the Inquisitors, who would cause the house to be visited and carefully examined in order to ascertain whether it had any private communication with the surrounding dwellings. In addition to all these precautions, "lions' mouths" of iron were at every street corner, so that all who had any spite to gratify against their neighbours might convey their anonymous complaints to the Inquisitors. Then there were hosts of spies belonging to all classes; even prostitutes and thieves were thus employed; and this odious tribunal continued to exercise its atrocious functions until the overthrow of the Republic by the French.

One not sufficiently acquainted with the subject would naturally ask, Why did not the Church interfere to prevent such atrocities? But so it did, many a time. Several popes denounced Venice as a disgrace to Christianity; more than one Pope excommunicated the Republic, and declared its conduct infamous; whereas the popes were the best friends of the Venetians before the Council of Ten was established. As it is our wish to do justice to Catholic as well as Protestant, to Pope as well as President, we will pause here to take a brief glance at the relations between the Church and the Venetian Republic. When the Emperor, Frederick Barbarossa, sought to destroy all the republics of Italy, especially the free and heroic communities of Lombardy, their

friend and protector, Pope Alexander III., did all he could to save them. Being overpowered by the forces of Barbarossa, he sought an asylum in Venice, the Republic having then become illustrious by its successful wars against the Saracens, and its splendid conquests both in the East and the West. The Emperor indignantly demanded that the Pope should be delivered up to him. In reply, an army was sent under Sebastian Ziani, who defeated and put to flight the imperial forces, and destroyed forty-eight sail of the fleet sent to the Adriatic for the express purpose of forcing Venice to violate the rights of hospitality (A.D. 1172). When Ziani was returning with the trophies of his victories, the Pope accompanied the Senate to welcome home in a triumphant procession their victorious chieftain. After the enthusiasm which the arrival of Ziani under such circumstances had somewhat subsided, his Holiness addressed him as follows: "Ziani, take this ring and present it to the sea as a testimony of your dominion over it. Let your successors annually perform the same ceremony, that posterity may know your valour purchased such a prerogative, and subjected this element to you even as a bridegroom is husband and lord over the bride whom he has chosen." Be it remembered that there was no tyranny at this time, but that the Venetians were as free and happy as any people in Christendom. Subsequently when the Republic commenced the atrocious system which we have adverted to in the preceding pages, the favour of Alexander availed it nothing; the popes did all in their power to punish it. An instance or two will sufficiently illustrate this fact.

On the death of Azzo of Este, Marquis of Ferrara, his natural son, who had attempted to murder him, claimed his inheritance to the total exclusion of the rightful heir, the brother of the marquis; and because his mother was a native of Venice, the Republic recognized his claim to the marquisate, and his right to dispose of it as he thought proper, although the people of Ferrara indignantly protested against the usurpation. The new marquis was induced to sell Ferrara to the Republic for a thousand ducats, and an army was immediately sent to occupy the territory. Pope Clement V. sent two nuncios to Venice to protest against a proceeding so contrary to every principle of justice and morality; but the oligarchs dismissed them without the least satisfaction. Then the Pope issued a bull declaring the Republic *infamous to the fourth generation;* its

goods and possessions the lawful prey of the first takers, &c. The bull concluded by proclaiming that God would look with an approving eye on every act of hostility which should tend to blot the oligarchs and their posterity from the memory of mankind. This was very severe, but who will say in view of the atrocities we have noticed above, that it was too much so? The Republic paid no attention to the bull, further than to forbid all citizens of Venice, lay and ecclesiastical, from giving it publicity or noticing it in any way, on pain of death. This, however, did not save Ferrara, whose inhabitants rose *en masse*, drove out the Venetian mercenaries, and restored the rightful heir to his inheritance.

On another occasion the Pope, finding that excommunication had no effect on the tyrants of Venice, declared war against them; their first reply was to issue a decree, declaring that no quarter should be given to armed priests. Having taken an ecclesiastic prisoner soon after, on the shore of Agirelega, they condemned him to ride backwards on a mule, holding the tail for a bridle, preceded by the common crier, who proclaimed before him, "Behold the wicked priest who displeased God in his life, and was taken in iniquity," (A. D. 1274).

As we have already remarked, it is not one Pope, or two, or three, that sought to compel Venice, in one way or other, to have some regard for the claims of justice and humanity. But we must confine ourselves to one instance more. Passing over several centuries of atrocities, and many protests against the latter from the Vatican, we come to the time of Paul V., who attempted, in vain, to rescue several ecclesiastics from the dungeons of the Council of Ten. On the 17th of April, 1683, this pontiff issued a decree of excommunication against the Council of Ten, the Inquisition of State, and the Doge, which was to take effect in twenty-four hours, if the doomed prisoners were not delivered up to the Nuncio within that time. A large number of the clergy obeyed the Pope, at the risk of exciting the wrath of the Council of Ten; so many pursued this course that it would have been inconvenient to find prisons or racks for all; accordingly they were marched in procession out of the city by troops of soldiers, with a box, containing the eucharist, suspended from the neck of each.

Because *Fra Paolo*, better known as Sarpi, the infamous Secretary of the Council of Ten, is called a monk, some

well-meaning, but credulous and shallow, writers regard him as representing the Christian Church; whereas, if he had ever been a monk, he was a renegade of the worst kind, and one who detested the Pope. It is necessary to bear in mind that the representatives of the pontiff were the Cardinals Bellarmin and Baronius; while the champion of the Council of Ten was Sarpi; and whereas the former pleaded the cause of humanity and justice, the latter recommended such atrocious sentiments to his employers as the following:

"Un ouvrier de l'arsenal, un chef de ce qu'on appelle parmi les marins le menstrance, passait il au service d'une puissance étrangère: il fallait le faire assassiner, surtouts si c' était un homme réputé brave et habile dans sa profession."—(*Art.* 8, *des Statuts.*)

Bossuet mentions as a matter of history that Calvin was not a more implacable enemy to the Catholic Church than Sarpi;* that he did all in his power to bring the mass into discredit; and that he exercised whatever influence he had to cause an entire separation between the Republic and the Church of Rome. In proof of the latter fact Bossuet quotes from Bedell, Protestant chaplain of the British embassy at Venice, who wrote to his friend Diodoti, inviting him to come to Venice; that they hoped to have a reformation there in a short time.† This may perhaps account for the good will of Mr. Hazlitt towards the Council of Ten and the Inquisitors, whom, as already remarked, he always regards as "Reformers."

As the decline of Venice increased, and her weakness became more and more apparent, the Council of Ten became less bold. The subjects of other states were treated with more caution; foreign ambassadors had ceased to be molested in their residences. But the Venetians themselves were oppressed nearly as much as ever. So late as 1755, Count Capucefalo, who had formerly been Consul at Zante, was put to death by the Inquisition, on the bare suspicion of having carried on a correspondence with the Austrian Ambassador. Finally, when the hour of danger arrived, no government could have acted with greater pusillanimity than the Council of Ten. It is true that the oligarchs remained haughty to the last. When the French Revolution broke out they had offers of alliance from the French and Austrians in turn, but they rejected each. A small French ship, which attempted to enter the lagunes

* If any further proof of this were necessary, it would be found in Sarpi's History of the Council of Trent (*Istoria del concilio Tridentino*). London, 1619.

† *Ecclesiæ Venitæ reformationem brevi speramus*—Bossuet, *Hist. des Variations*, i, 7.

contrary to the laws of the Republic, was violently attacked by the forts and destroyed. When the Inquisitors gave orders to fire on the single French ship, they were not aware that the French army was already in Italy. The Council of Ten sent deputies to Napoleon to explain and apologize; but he only replied by issuing a proclamation, calling on the city and province of Venice to shake off the authority of a government which had oppressed them for centuries. Both Venice and Padua seemed delighted to have an opportunity, and they lost no time in forming provisional municipalities. The Senate and Council of Ten became frightened, and suspended their deliberations. A *conferenza* was held in the private chamber of the Doge (April 30, 1797), but before they could come to any conclusion the news arrived that the French were preparing to attack the capital. The Council of Ten was seized with consternation, and several members proposed the immediate surrender of Venice. The proposition was referred to the Great Council, which unanimously agreed to it. On the same day (May 1, 1797) Napoleon issued a formal declaration of war against Venice. Deputies were sent to him, but he refused to listen to any negotiations until the destruction of the French ship and the assassination of the Frenchmen it contained had been avenged by the *death of the three Inquisitors of State*, and the commander who carried out their orders in sinking the French ship. In order that they might have time to deliberate on this proposition Napoleon granted them an armistice of five days; but only three days of the time had passed when the Great Council voted almost unanimously for the arrest and trial of the three Inquisitors of State and the commander, the Doge in the mean time offering to renounce the ducal dignity. The next step was to send away the 11,000 Slavonians originally brought to Venice, ostensibly for its defence against foreign foes, but really for the purpose of overawing the Venetians, so that they should not attempt to resist the atrocious decrees of their masters. Lest this might not be sufficiently satisfactory to Napoleon, all the forts in the capital and the lagunes were disarmed. All necessary preparations having thus been made the French armies quietly entered Venice. It need hardly be remarked that no government ever had a more inglorious end.

The people, the descendants of those who had set at defiance the armies of Charlemagne and of Pepin, and forced them to acknowledge their independence, had only to look

on with folded arms. It is a remarkable fact that those whose hands had been tied for centuries, and been treated little better than slaves, wept briny tears at this humiliation; while many of their oppressors were glad to enter the service of the conqueror, and, if they had the power, would have been as ruthless tyrants as ever. So much had all classes degenerated under such a régime, that of all the people conquered by Napoleon, he was most ready to get rid of the Venetians; and accordingly they were not quite three months under French rule when they were transferred to the House of Austria by the treaty of Campo Formio. No doubt the yoke of Austria has often been heavy; but it is certain that no Austrian governor has oppressed the Venetians so atrociously as their own Council of Ten.

ART. VI.—1. *On the Nebular Hypothesis.* By DANIEL KIRKWOOD, LL.D., Professor of Mathematics, Indiana State University. —*American Journal of Science and Arts*, for September, 1866, vol. xxx., New Series.

2. *On the Nebular Hypothesis.* By DAVID TROWBRIDGE, A. M.— *American Journal of Science and Arts*, for November, 1864, and January, 1865, vols. xxxviii. and xxxix.

3. *Introduction to the Mathematical Principles of the Nebular Theory, or Planetology.* By GUSTAVUS HINRICHS, Professor of Physics and Chemistry, Iowa State University.—*American Journal of Science and Arts*, for January, March, and May, 1865, vol. xxxix.

4. *The Origin of the Stars, and the Causes of their Motions and their Light.* By JACOB ENNIS, Principal of the Scientific and Classical Institute, Philadelphia. 1 vol., 12mo. New York.

THE human mind is continually seeking for the cause of those phenomena which nature presents unasked, as well as such as she reveals when subjected to experimental operations. As yet all causes are secondary to man; only for a short time does he feel satisfied with having discovered one which carries him a step nearer the first cause, be that what it may. It is easy for us to say that God is the Great First Cause; but the enquiring mind is not satisfied with thus summarily disposing of the question; it seeks to discover how the Great Mind of the Universe, through the operation of general prin-

ciples, produces the various phenomena of nature. The general result of human investigation tends to show that all known causes are but modifications of one great principle.

The true method of investigation is to arise from phenomena, to the causes which produce them. From a want of the knowledge of all the phenomena pertaining to any one thing, the principle which we deduce is not always the true one, and we are sometimes obliged to frame hypotheses to aid our investigations.

About the middle of the last century a few philosophers began to speculate on the phenomena of the solar system and the sidereal heavens; but it was not till Laplace and Sir William Herschel had carefully studied those phenomena that a hypothesis was framed which seemed to include nearly all the facts of the outward universe—the macrocosm—and bind them together. The former of these philosophers saw five principal facts of the solar system which could not be owing to chance, and he therefore concluded that they all had a similar origin, and were the result of a similar cause. The latter, from his observations on the structure and contents of the sidereal heavens, carried on for many years, concluded that there exists in many regions of the visible universe, a nebulous matter whose density is very small when compared with that of the earth, and out of this substance stellar clusters are formed by the forces of nature. The *Nebular Hypothesis* of to-day embraces both classes of facts, those of the solar system and of the sidereal heavens. Every new discovery in the physical universe, whose bearing can at present be seen, seems to give it additional strength.

The nebular hypothesis, or nebular theory, is based on the assumption that all physical matter was once in a gaseous state, and held in that condition by caloric. But being surrounded on all sides with space, either filled or empty, whose temperature was 50° or more (Fah.) below zero, radiation would go on, the gaseous substance would thus be cooled, and all the mutations consequent on such a change of conditions would follow. The nebular theory attempts to show that these mutations are the causes of the phenomena of nature, as they are observed in the material universe.

It is necessary to show, in the first place, that gaseous or nebulous matter exists unconnected with the earth or any of the planets. That the earth once possessed a very elevated temperature is rendered evident by geological investigations, and that the interior is still in a highly heated condi-

tion, is shown by the existence of hot springs, earthquakes, and active volcanoes. Not only so, but the figure of the earth shows that its present form could only have been attained by assuming it when it was in a fluid state, and under the free influence of all the forces acting upon it. Sir John Herschel, in his *Outlines of Astronomy*,* suggests thatif the earth had originally been spherical, and covered with an ocean such as at present exists, upon its receiving a motion of rotation the action of the water would wear down the solid material, and transfer the débris to other parts till the conditions of equilibrium were attained. But an easy analytical investigation shows that the ellipticity of the earth would not be one-three-hundredth as it is now, but only one-four-hundredth. Thus the figure of the earth reveals its former fluid condition.

That nearly all comets, at least, are still in a gaseous state is a well-settled fact of astronomical science. The great comet of 1858 was subjected to a close scrutiny by some of the ablest observers with the best instruments in existence, but no evidence of solidity in any part of it could be perceived. Many indications of gaseous fluidity were to be seen. Changes in the envelopes surrounding the nucleus took place with great rapidity. The nucleus itself varied in size, as measured at different times—diminishing as the comet approached the sun, and for some time afterwards, as if it were a liquid and was evaporated by the intensity of the solar rays, and thrown off in the form of envelopes. Biela's comet at one time was seen to pass over a small cluster of stars of the sixteenth and seventeenth magnitude, and although fifty thousand miles thickness of cometic matter was between the observer and the stars, yet they still continued visible, notwithstanding the most trifling fog would have effaced them.†

The most conclusive evidence of the existence of nebulous matter, however, is that afforded by the *spectroscope*. Although scientists have not yet had an opportunity to subject the light of any of the great comets which occasionally appear to spectrum analysis, yet such as have been observed were found to have nuclei in the condition of a self-luminous gas.

In August, 1864, Dr. Huggins examined the light of a bright planetary nebula in Draco, with a spectroscope, and he found

* Art. 226, ed. of 1849. On the form of the earth, see Airy's *Mathematical Tracts*, Pratt's *Figure of the Earth*, and *Mécanique Celeste*.

† Grant's Hist. of Phys. Astronomy, pp. 298-4.

the spectrum to consist of three bright lines instead of being a continuous band of light of various colours like the spectra of the sun and fixed stars. Such a spectrum is formed by light from luminous gas, a part of which in this case seems to be hydrogen. Besides this an exceedingly faint spectrum was seen for a little distance on each side of the bright lines. Subsequent observations on other nebulæ induced Dr. Huggins "to regard this faint spectrum as due to the solid or liquid matter of the nucleus."*

It is unnecessary to enter into any further details in relation to Dr. Huggins' observations on the spectra of the nebulæ. Suffice it to say that many of the irresolvable nebulæ were found to consist of luminous gas, some of them having a solid or liquid nucleus.†

It is a well-known fact that the fixed stars exist throughout the visible universe in separate clusters of greater or less extent; in short, that such a thing as an isolated fixed star is unknown. Those which we call isolated fixed stars, and which appear to us as such, really belong to the immense cluster known as the Milky Way, our sun being one of the number. The immense distance which separates us from the nearest fixed star (*Alpha Centauri*) gives us some idea of the immeasurable extent of interstellar spaces.

Observation shows us that all the principal fixed stars are *not* fixed, but have a proper motion, which is partly due to the motion of the solar system in space, and partly owing to their own independent motions.‡ It has not yet been proved that clusters have a proper motion as a whole; but the gravitation of material bodies renders it necessary that not only separate stars, but starry clusters and nebulæ should be in motion to prevent their coming into collision. The components of binary, ternary, and multiple systems have a curvalinear motion around their common centre of gravity. What observation teaches us is true of the motion of these isolated systems, the science of mechanics teaches us *must* be true of the motion of the great system of the universe. Reason teaches us that there is a natural cause for the observed motion and arrangement of the contents of the sidereal heavens. What is that cause?

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* ee Amer. Jour. of Science, vol. xl. [2], pp 77-8.

† See "National Quarterly Review" for December 1867, pp. 107-108. The reader may also consult the American Journal of Science, vol. xl., pp. 77-81.

‡ Humboldt's Cosmos, vol. iii., p. 285.

Let us see what the solar system teaches in relation to this great cause. We find in the centre a luminary, immensely larger than any of the planets, around which, as the principal controlling body, the other members revolve. The primary planets revolve in the same direction, from west to east. The satellites, except those of Uranus, so far as known, revolve around their respective primaries from west to east. The primary planets, so far as known, rotate on their axis, from west to east. The secondaries rotate in the same direction, so far as observation has determined. The primary planets revolve in orbits, the planes of which have a small inclination to one another, and to the plane of the solar equator. The secondaries revolve in planes having a small inclination, so far as known, to the planes of the equator of their respective primaries. The sun rotates in the same direction as that in which the planets revolve around him. The distance between the planetary orbits gradually increases from the sun outwards. The planets increase in bulk, as a general thing, from Mercury to Jupiter; thence they decrease somewhat. The density of the planets increases from Mercury outward. The number of satellites belonging to each primary increases, as a general rule, from the sun outward. The time of rotation of the larger planets is much less than that of the smaller. A zone of very small planets (asteroids) exists between the orbits of Mars and Jupiter. Saturn is surrounded with several unbroken rings. The comets which visit the sun are not confined to a limited zone in the heavens, approximately coincident with that which contains the orbit of the planets, but their orbits have all inclinations to the ecliptic, from zero to ninety degrees; and the motion of some is direct, and that of others retrograde.

But any theory of the universe must not only explain the preceding facts, but it must also give a reason for the stability of the orbital motions of the planets, and of their axial rotations. In 1784, Laplace demonstrated the following beautiful theorems as applicable to our system, and insuring its stability: "If the mass of each planet be multiplied by the square of the eccentricity, and this product by the square root of the mean distance, the sum of these quantities will always retain the same magnitude." We learn from observation that for any particular epoch this "magnitude" is small. This theorem applies to the eccentricities. The other one has reference to the inclinations. "If the mass of

each planet be multiplied by the square of the tangent of the orbit's inclination to a fixed plane, and this product by the square root of the mean distance, the sum of such quantities will continue invariable."* Observation shows that the planets rotate around principal axes, which insures the stability of their rotations.

If the nebular hypothesis be a true theory of the universe, and there are still gaseous nebulæ from which stars are formed within the range of telescopic vision, the spectroscope ought to show them in the various stages of condensation from the purely gaseous to those which are almost starry in their structure. Our observations on the structure of nebulæ are not so extensive as we could wish; but we will quote from Dr. Huggins, one of the principal authorities on this subject. The recent examination of the great nebula in *Orion* shows that this large and wonderful object belongs to the class of gaseous bodies. The light from this nebula resolves itself under the refractive power of the prism into the same three bright lines. With a narrow slit they appear exceedingly thin and well defined. The intervals between them are dark, and in the light from no part of this nebula was any indication detected of a continuous spectrum, such as is characteristic of incandescent solid or liquid matter. Different portions of this great nebulous mass were brought successively upon the slit, but the results of minute examination showed that the whole nebula emits light, which indicates a constitution identical throughout the body. The light from one part differs from that of another in intensity alone:

"According to Lord Rosse and Professor Bond, the brighter parts near the trapezium consist of clustering stars. If this be the true appearance of the nebula under great telescopic power, then these discrete points of light must indicate separate and probably denser portions of the gas, and that the whole nebula is to be regarded rather as a system of gaseous bodies than as an unbroken vaporous mass.

"If the gaseous matter of these objects represented the 'nebulous fluid,' out of which, according to the hypothesis of Sir William Herschel, stars are to be elaborated, we should expect a spectrum in which the groups of bright lines were as numerous as the dark lines due to absorption found in the spectra of the stars.

"If the three bright lines be supposed to indicate matter in its most primary forms, still we should expect to find in some of the nebulæ, or in some parts of them, indications by a more complex spectrum, of an advance in the formation of the separate elementary bodies which exist in the sun and in the stars.

"A progressive formation of some kind is, however, suggested by the

* Mém. Acad. des Sciences, 1784.

presence in many of the nebulæ of a nucleus, the spectrum of which indicates that it is not pure gas, but contains solid or liquid matter.

"It may, therefore, be that nebulæ, which have little indication of resolvability, and yet give a *continuous* spectrum, such as the Great Nebula in *Andromeda*, are not clusters of suns, but gaseous nebulæ which, by the gradual loss of heat, or the influence of other forces, have become crowded with more condensed and opaque portions."*

Thus far, then, the spectroscopical observations of the nebulæ would seem rather to favour the nebular hypothesis than to disprove it. Sir William Herschel drew the facts for his theory of star-formation from telescopic observations. He found, as he supposed, nebulæ in all stages of progress, from the diffuse nebulosity, without definite form or outline, to the bright nebulous star, which consists of an apparently isolated fixed star, situated in the centre of a nebulous fluid of nearly circular outline. Dr. Huggins examined a nebulous star (55) in Andromeda, with a strong atmosphere, and he found the spectrum "apparently similar to that of an ordinary star."†

The reader has a right to ask what forces are in action in the gaseous nebulæ to regulate and control their formation into suns and planets. There is, perhaps, some evidence, as we before intimated, that all known forces are but different modifications of one great primordial principle; but in the present state of positive knowledge we cannot ascend to the origin, but must refer to secondary causes as the producers of the phenomena of nature.‡ We shall enumerate among these causes, repulsion, gravitation, magnetic, diamagnetic, and chemical action. Professor Ennis,

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* Am. Jour. of Science, vol. xl. [2], p. 183. † Ib., p. 80.

‡ We recently read some speculations on chemical and gravitative forces, in which the writer assumed that *motion* is the primary cause in nature, and that elastic, chemical, gravitative, and mechanical forces are a result of motion. At present, the best theory of light and heat is that which refers them to the vibrations of an elastic medium. Sound is also thus explained. We can, in the same way, explain chemical force. It is an instructive fact, that the law of gravitation has the same algebraic expression as the law of light; and that both vary according to the geometrical law of the equable distribution of the same absolute quantity of material over spherical surfaces of different diameters. That is, gravitation in its law is like a substance emitted from the surface of a body, and passing into space in all directions. Whatever may be the cause of attraction, we think, from the above consideration, that it must be similar to the cause of light and heat.

We know that every particle of matter, so far as observation extends, is in motion; but whether we should assume that attraction and repulsion are the cause of motion, or motion the cause of the existence of those forces, is yet an unsettled question. Granting the existence of cohesion as distinct from gravity, we know that motion would continue if attraction and repulsion should cease to exist.

in his work on the *Origin of the Stars*, assumes, and then attempts to demonstrate, that the attraction of gravitation alone is sufficient to explain the phenomena of nature. We view gravitation as the great and principal controlling power under whose guidance the outward phenomena of nature, so to speak, were produced. We are necessarily ignorant, at present, of many facts which would be required for us to give a complete history of the transformation of a gaseous nebulæ into suns and planets; but by assuming such a community in nature, that the earth with the forces and phenomena which here manifest themselves, is a representation of the astronomical class of material bodies, we are enabled to arrive at many important conclusions. That our globe in its principal features, is of the same general nature as all other similar bodies in the universe, we can scarcely entertain a doubt; for we know that both the telescope and the spectroscope furnish facts to sustain such a view.

Let us now assume that there existed, an immense number of ages ago, a nebulous body of a gaseous nature, similar in conformation and structure to the great nebula in *Orion*, or some similar object, and that it was subject to the actions of all the forces of the universe that pertain to such a body, whether they be the same as those which we have enumerated, or more or less. Spectrum analysis proves that the nuclei of the sun and fixed stars are either solid or liquid, and rendered luminous by heat; and calculations founded on the amount of light and heat radiated from the sun, show in the case of that body, at least, that its surface temperature is so high that we can form no adequate idea of it.* If the sun is rendered luminous by heat, analogy would lead us to conclude that not only the stars but the gaseous nebulæ owe their luminosity to an elevated temperature. We are not left to analogy in the case of the fixed stars, for experiment proves that we actually derive a great amount of heat from that class of bodies.

Modern chemistry has made known some curious facts of the chemical relations of so intensely heated matter; and these help to throw some light on the constitution of the gaseous, or primitive nebulæ. Heat, under ordinary conditions, is favourable to chemical combinations, but when the temperature becomes higher it reverses all affinities. Oxygen and hydrogen unite at a certain temperature and form

* See Celestial Dynamics; by Dr. J. R. Mayer, Am. Jour. of Science, vol. xxxvi. [2], pp. 264—5. Also Herschel's Outlines, Art. 397.

water, which at a much higher degree of heat become resolved again into its component gases. Thus it is possible to have the temperature so elevated that all substances would be completely resolved into their elements. The recent researches of Deville and others seem to warrant this conclusion. In other words, "we may suppose that all the elements, which make up the sun or our planet, would, when so intensely heated as to be in that gaseous condition which all matter is capable of assuming, be uncombined—that is to say, would exist together in the condition of what we call chemical elements, whose further dissociation in stellar or nebulous masses may even give us evidence of matter still more elemental than that revealed by the experiments of the laboratory, where we can only conjecture the compound nature of many of the so-called elementary substances."* In this way we may account for the fact that so few elements seem to exist in the gaseous nebulæ, as we infer from the small number of bright lines which their spectra exhibits. In this process of cooling and condensing the primeval elements of matter would combine in various ways and according to various proportions, and produce, one after another, the ordinary, or so-called "elements" of the chemistry of to-day.

All experience in relation to terrestrial things teaches us that we ought not to assume the primitive nebulæ to have been homogeneous in respect to density, at least; and telescopic observations of the known nebulæ prove that they are unequally dense in different parts. The diffuse gaseous nebulosity like that in *Orion*, is not symmetrical in form, nor has it assumed the conditions of equilibrium of a fluid mass. We may state the conditions of fluid equilibrium as follows: The fluid matter must be arranged in strata whose density throughout is constant, but it may be different in different strata. The resultant of all the forces acting on any one of the strata must be directed towards the interior of the mass and be normal to all the strata. The resultant of all the forces acting on the body must be equal to nothing.† Or we may state the conditions of equilibrium in the following terms: The *potential* of the fluid mass, when expressed in terms of any arc drawn on the surface of any one of the strata, must be constant for that stratum.

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* T. Sterry Hunt; Chemical News (N. Y.), vol. i., p. 82.

† See the demontration of this in treatises on Analytic Mechanics, Airy's Tracts, Pratt's Fig. of the Earth, &c.

Nearly every substance known, is subject to magnetic influence. The law of magnetic attraction being the same as that of gravitation, the law of their combination will be the same as that of either of the components, but the unit of force will be different. Thus, the variation of weight in passing from the earth's equator towards the poles, is not the same that it would be if there were no magnetic influence. Magnetic influence may, therefore, have much to do in determining the motion of the individual parts of the primitive nebula. Chemical affinity will also modify considerably the influence of gravitation; for two or more elements uniting, will not only change their relative situation, but many times the resulting compound differs in bulk from the sum of the volumes of the components; and although the mass remains the same, yet the resultant attraction will be different. We may hence conclude that although gravitation is the great controlling force, its effects will be considerably modified in the primitive nebula, by the other forces which we have mentioned.

We may now ask, how it is possible for a rotary motion to begin in the nebula? If the nebula were in equilibrium in all its parts, the resultant action of all the forces acting on it would be zero, and there would be no tendency to motion in any part; but if there be not an equilibrium throughout the mass the forces acting would produce motion. The tendency would probably be to move towards the centre of gravity; but owing to the resistance of the fluid, there would arise a deflecting force which would tend to generate a motion of rotation. Every part of the nebula would be subject to similar influences; and although some parts would produce motion in one direction, and others in the opposite, yet it is scarcely a supposable case to conclude that all the different motions would destroy one another, leaving no unbalanced motion. The superficial parts would necessarily be subject to more rapid movements than the other parts, so that those regions farthest from the centre of gravity would first begin to move.

Professor Ennis, in a sequel to his work on the *Origin of the Stars*, has enumerated four sources of motion in the primitive nebulæ, the first of which is drawn from the fact that rest seems to be unnatural in the universe, and the other three result from the action of gravity. These last, however, are but different cases of disturbance of equilibrium, and

they are, consequently, dependent on the general principle which we have stated above. The only source whence motion could result from the action of the forces of nature, is the disturbed state of equilibrium in the nebula. We here quote what Professor Ennis says of the second source of motion to which he refers. "When separate nebulous masses were formed by the ordinary principles of contraction and condensation, we cannot suppose they would be stationed at equal and symmetrical distances from one another, any more than we see among the white clouds which float together across the clear blue sky. Neither would they be of equal size, for the heavenly bodies, like the clouds, are very unequal in size. Therefore, by the force of gravity, the smaller would fall into the larger; and often two or three near together, though of similar size, would fall into one other. But any one could never fall directly towards the centre of gravity of another; because every approaching pair would be more or less under the influence of other neighbouring nebulæ. Therefore, in striking each other obliquely, and not in the direction of their centres of gravity, a rotation must result. These collisions must have been a thousand times more numerous than the fall of meteors now, and so they would continue until space became cleared of all small and neighbouring masses, and nothing remained but large and vastly distant nebulæ, each one of which is now represented by a great stellar system, containing numbers of fixed stars."*

There are so many ways in which a nebulous mass will fail to satisfy the conditions of equilibrium, that we are at a loss to select that which is the most probable, and which gives the most satisfactory account of the macrocosm. If we suppose the equilibrium of the interior of the primitive nebulæ to have been but little disturbed, and that the irregularities of the surface gave rise, through the action of gravity, to surface-currents, which run around the interior parts,† we are able to give a very reasonable account of the origin of the phenomena of the solar system.

Our considerations in relation to the primitive nebulæ have hitherto been of a general nature, but, henceforth, we shall speak more especially of the solar system. We shall speak

* From a pamphlet, extracted from the Proceedings of the Academy of Natural Sciences of Philadelphia, 1867. See also Am. Jour. of Science, vol. xxxviii., p. 347.

† This hypothesis is due to Prof. Ennis, "Origin of the Stars."

of the primitive nebulous mass, as the *solar nebula*; and shall suppose the circulating surface-currents to already have an existence, since we have shown in what way it is possible for them to originate.

Writers on physical astronomy demonstrate that there are two figures of equilibrium for the same period of rotation, when the density of the body is homogeneous; but, owing to the difference of the *vis viva* of the two equal spheroidal masses, so different in form as to have the ellipticity of the one very small, and that of the other very great, one figure cannot pass to the other without a sufficient impulse from without.* We may, therefore, assume that if the solar nebula were very much flattened at first, it would remain so during the whole process of its condensation and separation into discrete bodies. Although the primitive nebula was not homogeneous, yet its figure must have been approximately the same as if it were uniform in structure. The constitution and appearance of visible nebula as revealed by the telescope leads to the conclusion that the solar nebula was very much flattened.

Unless all bodies in the universe are absolutely of the same temperature, the state of any mass of matter, with reference to heat and cold, must be continually varying; and what is true now in principle, must have been equally true when the solar system was in a chaotic state. All the facts that we have been able to obtain in relation to the constitution of the physical universe, militate against the supposition that all bodies were of the same temperature, at least so far back as we can carry our speculations at this time in the light of facts.

The loss of heat would cause the nebulous mass to contract; and where a rotation of the nebula existed, whether in the whole of the mass or in the outer parts only, a contraction would accelerate the rotary motion, as we can easily show. The motion of a particle under the influence of the contracting force, was similar to that of a body moving in a resisting medium.† The particle would tend towards the centre of force; but its rotary movement would deflect it from that course, and at the end of a given period of time it would not only be found nearer the centre but also out of the line joining the centre to the original position of the

* See Mec. Céleste, Liv. iii., § 21.

† This idea of friction in the contraction of the nebula we first saw distinctly stated in Prof. Ennis' work, "Origin of the Stars."

particle. The outer particles of the circulating currents of gaseous matter would, in the rotary motion, move with a greater linear velocity than those nearer the centre of gravity of the solar nebula. If, therefore, we suppose a particle suddenly transferred from its position to a point nearer the centre, retaining its original velocity, it would be moving with greater rapidity than the particles immediately around it in its new position. The velocity of the particles would, therefore, be changed, that of the one would become less, and that of the others greater. The resulting effect would be a more rapid circulating movement. What is true of one particle will be true of others, and of the whole rotating mass.

The friction, or *angrenage* which exist between the outer circulating streams of gaseous matter and the inner portions of the nebula in contact with them, would continually cause more and more of the nebulous mass to rotate, till, finally, in the course of immense ages, the whole body would be set in motion. The rotary motion of the solar nebula would develope a centrifugal force which, in the course of time, would equal in the outer currents first, the attractive force of the inner mass, and thus a ring of nebulous matter would be abandoned, or left to pursue a course independently of the remaining part. In a similiar way other rings would afterwards be formed.

If the matter in the solar nebula were systematically distributed, the separation of a ring might cause the axis of the interior mass to become inclined a little from its former position, causing the plane of the next separated ring to differ somewhat from that of the former. The orbits of planets formed from such rings would have a slight inclination to one another and to a fixed plane. Since the position of the invariable plane of any system cannot change from the action of its members; and since the plane of the first ring abandoned would coincide very approximately with the principal, or invariable plane, there ought to be a near coincidence between the invariable plane as it is now found and the plane of the orbit of the outermost planet. The plane of Neptune's orbit does not differ much from the position of the invariable plane of our system.

It is highly probable that the density of the first two or three rings would be so small, and the width of them so great, that their interior parts would move with a greater linear velocity than the outer parts, and a planet formed from

such a ring would rotate in a direction opposite to that in which it revolved around the sun. It is, therefore, not only possible, but probable, that Uranus and Neptune rotate from east to west.

Professor Benjamin Peirce discovered, by means of analysis, that the rings of Saturn are sustained by the action of the satellites.* Professor Maxwell has shown that if we leave the influence of the satellites out of the question, a fluid ring will be broken up into small separate bodies.† Professor Kirkwood has shown‡ that the principal division in Saturn's ring is owing to the attraction of the satellites; and by supposing that a gaseous ring once existed immediately within the orbit of Jupiter, as required by the nebular hypothesis, he shows that the action of that planet would cause the primitive ring to be separated into numerous narrow rings; or if the original ring had separated into small bodies, such bodies, or planets, would be drawn into groups. We may now sum up as follows:

Professor Peirce's theory shows that a ring where the asteroids now are, would exist as such for a long time; Professor Maxwell's theory shows that the ring would ultimately be broken up into small bodies; and Professor Kirkwood's theory shows that such bodies would be arranged in groups. Observation has made known the existence of nearly a hundred asteroids between the orbits of Mars and Jupiter, and by a comparison of their orbits Professor Kirkwood has shown that they exist in groups, as his theory requires.§ It is the powerful masses of Jupiter and Saturn that caused the existence of the asteroids where they are found.

The linear velocity of Mercury in his orbit is about twenty-five times as great as that of the sun's equator. If every part of the solar body had been rotating with the same angular velocity at the time the Mercurial ring was abandoned, the equatorial parts of the sun would have moved with a velocity greater than that of Mercury in his orbit. From these facts and considerations, we conclude that all the interior parts of the solar body were quiescent, or nearly so, at the time the Mercurial ring was separated.‖

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* Gould's Astro. Journal, vol. ii., p. 18.
† On the Stability of the Motion of Saturn's Rings, p. 45.
‡ Metier's Astronomy, pp. 102-111. § Ibid.
‖ See Ennis on the Origin of the Stars, pp. 255-6.

If we suppose the density of the sun in its equatorial parts to be one-fifteenth of his mean density when he was expanded to the orbits of the several planets, and that this density was equal to that of the planet when in its expanded form, we find the diameters of the several planets, expressed in miles, as given by Professor Ennis,* as follows:

Mercury	974,000	Jupiter	231,200,000
Venus	4,428,000	Saturn	284,600,000
Earth	6,893,000	Uranus	296,400,000
Mars	4,954,000	Neptune	504,800,000

These numbers are very instructive. They show us why the earth and the larger planets have all the satellites; why the latter have so rapid a rotary motion as compared with that of the smaller planets; and why the asteroid ring seems to separate, as pointed out by Humboldt,† the primary planets with two general classes, the exterior ones, Jupiter, Saturn, Uranus, and Neptune, having a period of rotation of about ten hours, and the interior ones, Mars, the Earth, Venus, and Mercury, each rotating in about twenty-four hours. After the Earth had abandoned its satellite-ring, its condition was then very nearly the same as that of the other interior planets.

In 1849, Professor Kirkwood made known the existence of a certain relation between the members of the solar system. It is this: The square of the number of axial relations of a planet in its period of revolution, or year, is proportional to the cube of the diameter of its sphere of attraction. The "sphere of attraction" is found in this way. Take three planets—Venus, the Earth, and Mars, and suppose them lying in the same straight line. Somewhere between Venus and the Earth there is a point where the attractive force of the two bodies would be equal, and a similar point exists between the Earth and Mars. The distance between these two points is the diameter of the earth's sphere of attraction. Dr. B. A. Gould named this relation Kirkwood's Analogy. Dr. Gould says: "Mr. Kirkwood's theory, as regards the rotations of the planets, will, if found to be true [its truth is generally admitted now], furnish a remarkable and unexpected argument in support of the nebular hypothesis. The minds of many have been wavering of late with regard to this hypothesis; their doubts have been strengthened by the unqualified assertion that all neb-

* Origin of the Stars, p. 261. † Cosmos, iv., p. 422, Bohn's ed.

ulæ are resolvable; but this analogy of Kirkwood tends, most strikingly, to confirm it—so much, indeed, that if this latter be true, I do not know how any one can resist the argument which it furnishes in favour of the former, in so far as it applies to our solar system. It is then no longer a hypothesis, but becomes a probable theory."*

Meteoric stones may have their origin in the solar system, or they may come *ab extra*. It is not improbable that some portions of the lunar ring did not unite in the moon, but became small satellites of themselves; which, by the perturbing influence of the moon, might be drawn into the terrestrial atmosphere, whose resistance would bring them to the earth. We have better evidence, however, that they come from the Asteroid ring; for observation has made known the existence of nearly a hundred such bodies, and new ones are being discovered every year. Many of them are but a few miles in diameter, and thousands, without doubt, exist, but they are too small to be seen by our most powerful telescopes. Many such small bodies, owing to the extraordinary perturbations to which they are necessarily subject must find their way into different parts of the solar system, and not unfrequently come in contact with the planets.

A few comets may have had their origin in the solar system; at least, we grant the possibility of it, but think the probability of it is very small. Some able astronomers at present regard comets and meteors as of the same general nature, differing only in magnitude.† Since meteors come in streams (not, indeed, like water, but as small, unconnected masses of nebulous matter), rather than in independent bodies, like the planets, their existence is easily accounted for by supposing them to come from regions far beyond the limits of the solar system. If we suppose a nebulous mass of any form to begin to move towards the sun from the interstellar spaces, the part nearest to the sun would reach the perihelion of its orbit long before the central parts would; and if the attractive forces of the solar system should cause it to be retained in an elliptic orbit, the particles of nebulous matter would never again be collected into a form similar to that which they at first had, but instead, they would exist as

* See Am. Jour. of Science [2], vol. x, p. 26.
† Ib., vol. xliii., pp. 291-9.

a ring (if closed), or a stream (if not closed), of meteoric matter.*

We may now ask, What maintains the sun at its present elevated temperature? That immense focus of light and heat must be continually diminishing in temperature, and unless its fire is replenished it must ultimately go out. We may state, first, that the sun does not lose all the heat which it gives out, but a considerable portion of it is given back by the other bodies of the universe. It has been proved, as before stated, that we derive considerable heat from the fixed stars. According to Professor Helmholtz, "if we adopt the very probable view, that the remarkably small density of so large a body is caused by its high temperature, and may become greater in time, it may be calculated that if the diameter of the sun were diminished only the ten-thousandth part of its present length, by this act a sufficient quantity of heat would be generated to cover the total emission for two thousand one hundred years."† Dr. Mayer proposed a few years ago the fall of meteors into the sun as the cause of his present elevated temperature, and its continued existence.‡ We know from observation that millions of meteors are daily coming into our atmosphere, and reason teaches us that immense swarms of them must be almost continually pouring into the sun. Experiment and calculation prove that the amount of heat thus developed by percussion is very great. Professor Ennis contends that solar heat is owing to chemical action.§

We contend that all the causes which have been mentioned are the source of the sun's elevated temperature, and the cause of its long continuance. The nebular hypothesis supposes the solar nebula in the beginning to have had an elevated temperature, and we have only to look for causes that will maintain it. The fall of meteors will not only develope heat by percussion, but the burning of them in the sun will do the same thing; and the contraction of the sun's diameter will equal its increase by the fall of meteors. His increase in mass could not be perceived for ages.

We believe, however, that the sun's light will one day go

* This is the theory of M. Schiaparelli, of the Breva Observatory at Milan; and Professor Newton, of Yale College, one of the first authorities on the subject, characterizes it as "the most important recent contribution to the theory of shooting stars." See Am. Jour. of Science, xliii., pp. 291-9.

† Youman's Correlation and Conservation of Forces, p. 244.

‡ See Am. Jour. of Science, xxxvi-vii, 203-4, and 192. § Origin of Stars.

out, or the planets and all other bodies in our system will fall into the sun, and be re-converted into vapour. Material nature seems to be subject to cyclic changes. The reader will see that our system being developed under the influence of all the powers pertaining to it, must be stable so far as gravitation can effect it. We shall only add that the nebular hypothesis, like the undulatory theory of light and heat, is gradually taking precedence of all others.

ART. VII. 1. *De Occulta Philosophia.* AGRIPPA. 3 vols.

2. *Opera Omnia* (Complete Works). PARACELSUS.

3. *Opera Omnia.* VAN HELMONT.

4. *The Works of Emanuel Swedenborg.*

5. *Odish-magnetische Briefe.* (*Odic Letters*, &c.) VON REICHENBACH.

FROM time immemorial, mankind has set apart from ascertained and reported facts or phenomena a certain class, and placed it in the darkest, dustiest corner of its storehouse labelled in deepest black: "The Supernatural." In recent, enlightened days, this gloomy department has rarely been visited. Our modern science accepts only the facts of broad daylight, and goes soundly to sleep with the setting of the sun. A mysterious horror seems to seize it the moment mention is made of the occurrences of darkness. Whether this horror be fear of truth or fear of the devil, we shall not attempt to decide. Suffice it to state it as a fact.

The question that arises to every rational being is this: What ground of distinction, if any, is there between that class of facts which all mankind is ready to accept as natural, and the other facts which are by so many pronounced supernatural?

For if there is such a ground of distinction, then its very showing up will furnish the key to the explanation of all the facts considered inexplicable; whereas, if there is none, if phenomena are *arbitrarily* arrayed under the one or the other class, then the problem also will have been solved by the proof that there is no problem to be solved.

Not every systematic representation can afford to go back to the fundamental principles of all knowledge for its basis. Those principles must be supposed to be generally

known from a study of the science of knowledge, for to restate them at every occasion would be an endless task. It will, therefore, be not improper to state, historically, that it is an *à priori* necessary conception of reason, that each minutest particle (atom or monad) of the universe stands in reciprocal causality with all others. Each pulsation, each breath of our mouths, the removal of a single grain of sand affects the whole universe. This reciprocal causality is generally regarded from a twofold standpoint, as either of a quantitative or qualitative nature. In the former case the causality is said to be mechanical, and called attraction; in the latter case it is said to be chemical; both relations being, however, merely different views of one and the same relation, for a chemical process is simply the displacement of "atoms" from a previous position, and a displacement always operates through attraction. In fact, the whole transition, from quantity into quality, so far as natural objects are concerned, is based entirely upon change of place or position, and hence upon mechanical principles. The distinction between chemical and mechanical processes is, therefore, utterly arbitrary. No one has demonstrated this with greater clearness than Swedenborg, in his *Principia*. If it is, however, an arbitrary distinction, then there may be infinite ways of viewing the causality between external objects, and this will possibly turn out to be the case. Indeed, it is a well-known fact that the operation of magnetism, electricity, heat, &c., being as yet unassigned to either class of causality, is, in point of fact, already accepted as a third, fourth, and fifth manner of viewing that causality.

When it is now considered, that in the history of mankind only those phenomena could be accepted as natural, whereof the causality-relation could be established, we are near the solution of our problem. For to accept a fact as natural, or to comprehend it, signifies to see its genesis from its ground, and to show up the ground of a fact is to establish its causality-relation. Thus all facts of nature, which could easily be seen to be the results of mechanism, were first and easiest comprehended, and all facts which could not be immediately explained by its means, were necessarily pronounced to be supernatural. The causality-relation between the planets in space, for instance, was utterly a supernatural fact—*i. e.*, the effect of God's specially exerted power—until Newton arose to show that we could subsume it under the general category of mechanical attrac-

tion. In the same manner a number of facts of so-called chemical causality were, for a long time, held to be incomprehensible, and the production of supernatural causality; but above all was the fact of the causality existing between the magnet and the iron regarded as incomprehensible until Swedenborg shewed it, like all other phenomena of attraction, to be subsumable under the category of motion; the particles in the magnet being placed in such a manner as to cause to issue from it a current of motion wherewith it, as it were, sucks unto itself the iron.

Now, at all times of human history, certain facts occurred which could not be arranged under any known category of thinking; and these facts were, therefore, assigned to the region of the incomprehensible or to the supernatural. But since the process of subsuming facts under categories is altogether dependent upon the freedom of reflection, there could be no valid ground of distinction between the two classes of facts, and hence every age, and indeed every individual, in the judgment of facts of mere nature, arbitrarily classified them. A may call supernatural what B will call perfectly natural, and *vice versâ*, as either party may be best able to subsume the fact under a category. Hence there is no objectively valid ground of distinction between the pure phenomena of nature. The distinction is purely arbitrary. At each age, certain facts were arbitrarily assigned to magic, sorcery, witchcraft, the supernatural, spiritualism, &c., all of which terms are merely a sign = X to designate an unknown category; and it was the great merit of the scholars of the middle ages—of Tritheim, Paracelsus, Van Helmont, Agrippa, Albertus Magnus, &c.—that for this X they sought to substitute a rational category, or a real causality-relation; therein much in advance of our modern men of science, who have relapsed into the use of those wretched terms of witchcraft, &c., or of the still worse classification of humbug, charlatanry, &c. With these men, therefore, began the first attempt to achieve a comprehension of *all* the phenomena of life.

Hence we find amongst these men a zealous endeavour to arrange all facts which were not immediately explicable through the mechanical process of nature under another causality-relation, and to establish a new name or comprehension for its manner of working.

For the manner in which we enlarge our comprehension of the objective world is as follows: All its occurrences *can*

be gathered together or comprehended as the result of only *one* general causality-relation; but this comprehension we constantly endeavour to make clearer to ourselves. This making it clearer is achieved by means of separating again the one general comprehension into two opposites, then these opposites again into new opposites, &c., &c. This analysis—proceeding hand in hand together with its synthesis—we can continue to an infinite extent; and thus establish infinite modes of the one universal causality-relation. Each such mode we thereupon call a force and name it. *All force in nature is simply a mode of viewing the causality-relation between things;* and the number of forces is as infinite as our modes of regarding the one force. Whether you say, "there is only one force," or "there are an infinite number of forces," is all the same. Both expressions are true, and indeed constitute only one synthesis. Now, while the transcendental philosopher is well aware that forces are simply these modes of looking upon the causality-relation, the dogmatist holds them to be things in themselves, and hence speaks of these forces as actually existing and operative, although to do so is absurd. Thus we hear them speak of attraction as of an actually existing force, and in like manner of other forces. They also talk of a correlation of forces, as if there were any necessity to prove it; and get quite warm—to the great amusement of all who understand the joke—in discussing, whether there is such a thing as a vital process, besides the mechanical and chemical powers, instead of asking whether it is a necessary mode of viewing the general causality-relation, or, in other words, whether it has a valid ground of distinction from other forces.

Following this general dogmatic bent of all mankind, the great men of the middle ages also proceeded to establish an existence for their causality-relation, which was evident to their minds and which had as yet been unknown. Thus Van Helmont says: "There is in the air an uncreated something, which has no body, which stands between matter and spirit, and belongs to neither. It has not its like in all creation. It is not light, but rather a form married to air as its helpmate, although not united to the essence of air. Through this form the ether of the stars is immediately and in one moment borne to every point of the universe. It expands in heat and contracts in cold. It is most potent on mountains." And Maxwell adds: "This spirit continually floweth from the sky and continually returns into it."

Agrippa of Nettesheim naturally sought to bring even the manner in which the soul affects the body, and the causality-relation between God and the universe, under the category of this agency. Naturally, because every new mode of viewing that relation appears at first sight to be applicable to all phenomena, until it shows up its own limitation. Agrippa says: "Since the soul is a *primum mobile*, and has its own spontaneous motion, whereas matter in itself is incapable of motion, and altogether too opposite to the essence of the soul, therefore must we accept a medium, a something which is not truly a body, but already a soul, or not truly a soul but already a body; hence a medium between soul and body, by means whereof they are united, and the soul is enabled to unfold its wonderful powers. The same spirit is in the universe, and of the same form as ours is in our own body; for as the powers of our soul work upon the body by means of this spirit, so does the power of the world-soul work upon the world by means of that spirit. There is nothing in all the world which has not a spark of this power; but it is most potential in those things which possess most of that spirit which flows from the heavens and by means of the sun, the moon, the planets, and the stars above the planets, and infuses into all herbs, stone, metals, &c., their occult qualities."

Do these statements of Agrippa and Van Helmont sound so very different from what Humboldt says in his *Aspects of Nature?* "That, which invisible constitutes the weapon of the remarkable electric eel, which, awakened by the connection of humid, unequal parts moves around in all the organs of plants and animals, which thundering enflames the wide cover of heaven, which connects iron with iron, and directs the quick motion of the guiding needle; it all, like the colours of the separated rays, flows from one source, and flows together into one omnipresent power."

Or as the transcendental philosopher would apply the same simile: precisely as all colours are but infinite modes of viewing the never seen one light, so are all forces of nature but different modes of viewing the one universal power, which, itself, is never seen, and is only the opposition which the Ego makes to itself in order to behold itself.

When it was once understood that even the remotest particles of the universe must be regarded as influencing all others in a particular unknown mode of casuality, the influence of the stars upon mankind became all the more a

subject of profound study, as the influence of the moon was palpable to the very senses. Hence arose those famous calculations of astrology, which, far from being a mystic and supernatural affair, were built upon the plainest principles of nature, and never pretended to be aught else than natural. Utterly wrong and absurd as they may or may not be, the reproach that they were the upgrowth of superstition does not apply to them. The men who made those calculations had less superstition than our present enlightened men of science, who turn their backs upon countless facts of every-day occurrence and say: Humbug! which is but an equivalent for Magic! The famous Tritheim—the same of whom tradition has said that he conjured up before the Emperor Maximilian the shade of the celebrated Mary of Burgundy, and who thus was the prototype of Faust's conjuring Helena—was one of the most learned and wisest men of his time. Lerchheimer, in his "Christian Considerations against Sorcery," &c., says of him: "At our fathers' time, about seventy years ago, there lived Johannes of Tritenheim, a very learned and wise man, yet not in that he was much and secretly given to the devil; although *he always repudiated this charge and pretended that he did everything by natural means*, which, however, no sensible Christian will believe who sees or hears his doings."

Concerning these natural means, Tritheim himself writes: "That which occurs in my enflamed soul I can communicate to friends more than five hundred miles apart, without the use of words, signs, or tokens; I have a world-language, which is understood by all the world, and which I have neither learned nor heard." This causality-relation, of which we shall speak hereafter, belonging as it does to the second class of phenomena, must certainly have appeared very strange to such "sensible Christians" as good old Lerchheimer, but no clear-minded man to-day doubts that Tritheim worked by the very natural agency of what we call mesmeric power.

So, likewise, does Paracelsus, the disciple of Tritheim, ut terly disclaim all supernatural interference. That a peculiar causality-relation exists between all objects of nature, and even between the stars and man, is as clear to him as the sun's glory. But only so far as man is part of nature, is an earthly nature. Hear his noble words, and compare with them the *sorcery* preached by men like Moleschott and Vogl, who hold that *every* part of man, even his will, is ruled by

the external forces of nature. For what is the true meaning of sorcery, if not, that not intelligence, but dark nature works everything within us? "But therein is a great difference," says Paracelsus, "which is well to be observed, that one person is governed and necessitated by the stars, whereas another person is not. Hence it is of great need to know who can govern and master the stars, and who, on the other hand, is governed by them. Know, then, that the *wise* man can govern and master the stars, and the stars not him. The stars are subjected to him, and must follow him, but not he them. While, on the contrary, a *beastly* man is ruled, mastered, forced, and necessitated by the stars, in such a manner that he must follow them, as the thief follows the gallows, the murderer the wheel, the fisher the fishes, the birdcatcher the birds, and the forester the game. And what other cause is there for this, than that he knows not himself, nor how to use his own powers concealed in him, and *that the stars, and the whole firmament with all its powers, are in him*, &c.; whereas, the wisdom of man is in no one's service, and no one has given away its freedom; hence the stars must follow it, and be subjected to it, and not it to the stars."

Grandly speaks Van Helmont of this universal causality-relation: "If the ether of the stars worked upon us merely through their light, their influence would clearly cease as soon as we got under a roof, nor could it be exercised upon the water and the plants of the earth when the sky is cloudy. Nevertheless, the sick feel the analogical movement of the moon and predict the change of weather, because the lights of heaven are created and connected with the seeds of the things themselves. These things follow only the movements of the next related light, and the influence of the universal ether of the stars. *We carry the heavens in us, in the primary ground of life*, and with this pentaculum has the Almighty sealed all animated beings." "Throughout the whole universe," says Van Helmont elsewhere, "reigns this *magnale magnum*." By its means arises that attraction and sympathy, or repulsion and antipathy, which we witness everywhere. By its means the eagle is attracted to the carcases, which could not possibly be smelt by him, but which, being of the same nature whereof the eagle's body is composed, can be placed in potent relation to him. By its means the palm loves the palm, and bends over to it, the vine the elm, and the olive

the myrtle. By its means arises the friendship which we see the peacock displaying towards the pigeon, and the thrush towards the blackbird; and the enmity which the hare cherishes against the dog, or the scorpion against the lizard and the mouse—"hatred so great that even a dead mouse will, by its touch, cure the bite of the scorpion." By its means the chicken, otherwise flying at the very sight of a dog, will, when a mother, turn against the dog and cause him to sneak away; and by its means may some plants overpower our body through their mad phantasy, and may the *magnale magnum* of the mad dog hold our brain under its subjection. The hatred which wolf and sheep nourish against each other is so intense, that it lives even in their dead skins, so that a drum made of both kinds of skin will not sound. Thus, also, does rhubarb hate gall, does the sapphire hate pestilence, fever, and eyesores, does the amethyst hate drunkenness, and the emerald unchastity. Cabbage and marjoram so intensely hate each other, that they will not grow together in the same piece of ground. The vine has such sympathy with the vine that it will ferment anew whenever the vine blooms, and that this is not the effect of climatological causes may be noted by this that it ferments when the vine blooms, no matter at what time of the season it blooms; and that it ferments only in countries where the vine grows.

Thus does it happen that the man who sleeps under the skin of the glutton wakes up with an inordinate appetite, the *magnale magnum* of the animal having gone over into the sleeper and overpowered his own nature. All the phenomena called "odic" by Reichenbach belong to this class—the name "odic force," like the name "tellurism" used by Kieser, being but another word for Van Helmont's *magnale magnum*, and Agrippa's "spirit." Thus the cases of people, who have an aversion to yellow colour, faint before mirrors on account of the power exercised over them by the reflected light and by the quicksilver; or who love pickles, vinegar, &c. Nay, this force, connecting objects together, can even, in some instances, become perceptible to the touch. The same spiral current of movement which Swedenborg posits as issuing from the magnet and as explaining the attraction and position of the planets, can be *felt* by some persons when holding their hands over crystal. From each pole of the crystal a current of air arises towards the hand. Most persons can feel it, also, when holding their

hands over water, or a piece of iron close to the eye or lip. Nay, it can even be seen, for Reichenbach tells of many instances when his sensitives have seen issue from the pole of the magnet magnificent streams of light, and fall down like a glorious cascade.* Every one can see the effects of this current of motion by holding between his thumb and forefinger a piece of iron attached to a string. If you hold the other fingers horizontal the iron will move to and fro; whereas, if you hold the other fingers perpendicularly, the iron will move with a circular movement.

Concerning the "odic" effects of *colour* much curious information is to be obtained from Goethe's theory of colours. Paracelsus held that blue cures all diseases of the throat, whereas yellow operates upon the bile. A glass of water exposed to blue light, says Reichenbach, will taste cool and agreeable, but when exposed to yellow light, warm and disagreeable, although no *chemical* difference can be established between the two kinds of water. Water exposed to the moon, says Reichenbach, tastes bad, and Van Helmont held the same, assigning as a reason that moonlight favours decomposition. Hence the moonlight is bad for the cure of wounds, but an excellent agent for the cure of sores, which are to be got rid of through decomposition. Thus, also, the sunlight does not always produce heat. Often the shade is warm, and the light cold.†

It were, indeed, an interesting subject of investigation, to gather together all the distinctive phenomena which are the result of *reflected* light, whereof the moon furnishes probably the best example, and to observe in what manner it is the agent of death, as direct light is the agent of life.

Van Helmont tells many curious stories of the manner in which this causality-relation operates. Thus the following: "A citizen of Brussels lost his nose in a battle. He went to a surgeon in order to have a new nose put on. But not willing to have the flesh cut out of his own arm, he hired a poor man to undergo the operation. The citizen of Brussels returned home with his new nose made out of another's flesh, and all went well until, after the lapse of thirteen months, his nose suddenly grew cold and within a

* Schubert also holds that the motion of attraction is visible, and mentions instances. See "Die Symbolik des Traumes," chap. "Die Echo."

† See Odic Letters.

few days fell off, rotten. Investigations made, led to the discovery that the man, from whose arm the nose had been taken, had died at the same moment when the nose had grown cold." "I know an herb," says Helmont in another place, "which, if you take it in your hands and let it grow warm therein by crushing it, will cause every one with whom you shake hands afterwards to feel a particular physical attraction for you for several subsequent days."

We may add the following instances: Jacob Boehme fell into a trance after having gazed steadily for some time at bright tin. Kaspar Hauser was extraordinarily sensitive—from his long contact with nature alone—and could distinguish the impressions produced by different metals upon him with great clearness. A cold current swept up his arm when his fingers touched gold. Less cold as he touched silver, still less when he touched iron, brass, and lead. He could scarcely eat with a spoon of silver. Tycho de Brahe trembled when looking at a hare; while Schiller detested spiders, but preferred the smell of rotten apples to all perfumes. Royston tells of a man who had to vomit whenever ipecac was powdered in any part of his house. In Moritz's valuable "Magazin für die Erfahrungsseelenkunde" the following story is told and vouched for by Goerking. A very sensitive man happened to sit in a garden with a celebrated German author. Suddenly he grew very restless. and when asked for the cause of it, he replied that a human body must be buried along the garden wall. The spot pointed out was dug up and a human skeleton discovered. No man could tell how it came there. Pfeffel and his brother often took a walk with a friend, a clergyman, past a little grove. At a certain point of the walk the clergyman always turned around and could not be induced to pass any further. Frequent and earnest entreaties made him confess that a white, long, and bony human form stood on that spot and prevented him from passing it. The brothers who probably thought it a foolish freak of their friend, agreed to drag him past the spot on a certain occasion, and did so. The clergyman was greatly excited and indignant; and when the brothers now caused the place to be dug up, a skeleton was found. After it was taken away the clergyman saw no form there again.

To the same class of phenomena belong the facts of the hazel rod, which tells when water and minerals are concealed under the ground. It is not true that the rods are neces-

sary for the operation, although they certainly increase sensitiveness. The fact is that some persons have a peculiar talent to distinguish between the impressions made upon their senses by external objects, which enables them to tell whether they are in the neighbourhood of copper, iron, water, or gold; and this sensibility can be cultivated like any other ability of reproducing sensuous impressions. There is no reason why this should appear strange. People when hearing music for the first time can distinguish no tones, not even a melody. Only through long and constant habit of close attention do we attain the ability to become conscious of the different impressions produced upon us by the different tones. The ground is that the ego must be active in order to be self-conscious. It must reproduce the impressions given. In the same manner we are all, doubtless, impressed by every object around us, only we cannot distinguish between the sensations, and hence cannot become conscious of them.

Some people again—like Reichenbach's "sensitives"—have more talent for this sort of reproduction of sensations, as others have more talent for music, colour, &c. But there is no doubt that each person can cultivate this power to an indefinite degree, and thus learn to distinguish between the different sensations gold, iron, water, &c., will produce upon his body.

To a mind unprejudiced by the cant of modern science there will seem nothing superlatively strange or supernatural in this reciprocal causality between objects of nature; and all that is wanted here, as in every other science, in as far as it is empirical, is a reliable collection of facts, and next the grouping together of these facts for the practical use of mankind. This collection and arrangement of facts has only been done in one field of science—the medical profession. It was, indeed, in the nature of the case, to pay pre-eminent attention to the medical aspect of this causality-relation, and hence Paracelsus, Agrippa, &c., have left quite a number of themes and precepts.

Their general theory as applied to diseases was somewhat as follows: 1. The influence which each part of the universe exerts upon all others may also be regarded as a medical influence. 2. The law of opposition being applicable to all phenomena of the causality-relation, this influence is also to be regarded as of an opposite or polaric character; and hence each part has in its relation to all other parts in general, and

particularly to the human body, either a friendly or hostile effect. 3. The closer a part is brought into *relation* with the body upon which it is to exert causality, the more effective it will work; and hence the establishing of this relation is an artificial process. 4. In medical matters such parts of the human body as blood, sweat, hairs, nails, urine, excrements, &c., being particularly impregnated with the disease of the body, and being, so to speak, magnetic with the disease, may thus be made use of to transplant the disease into other objects of nature, and by the reaction of these objects—now placed in relation to the human body—to draw out the disease. 5. The power latent in these excrements, &c., is made free in fermentation, and hence does not operate until it rots and thus grows free.

Upon this theory grew up that famous science of transplantation, a science still practised to an incredible extent, and of which probably every reader of this Review can call an instance to mind of a friend or acquaintance, with warts on the hand, which a "witch" "charmed" away by tying as many knots in a string as there were warts on the hand, and then burying the string in the ground. But the other day we were told by as clear-headed and unbelieving a man as one could wish to meet, an instance which serves admirably to illustrate the practice. He had, when a child, been long suffering from jaundice, and the physicians could do nothing. Finally his mother went to a neighbouring woman, who enjoyed the reputation of being a witch. The witch said like Tritheim: "It is all done by natural means, and to convince you of it, I will cure your son at midday, although he will suffer more than he would at midnight when the moon is up. Bring me his urine." So the mother brought it, and at midday the boy was suddenly seized with violent spasms, and thereupon fell into a trance, which lasted several hours, after which he awoke cured. The *modus operandi* of the witch was not known to our informer, who only recollected that upon her death many hundreds of pots were found buried in her garden. It was, therefore, probably the method called by the "quacks of the middle ages" (Paracelsus, Van Helmont, &c.) "transplantation into the soil." The urine which contained the disease in its highest potentiality, the witch buried in the ground, where it began to ferment and immediately placed itself into relation with the body it had left, drawing out from it the disease as iron draws out magnetism from the magnet!

The mode of transplantation is as various as the disease itself, and, of course, to a more or less extent, to be tested in correctness by empirical trials. The usual rule is, however, to make the "magnet" out of that part of the body which is most affected by the disease. In diseases of the lower organs, the excrements are used; in diseases of the throat, the spittle; for eruptions, some of the matter, &c. The magnet may be deposited in the ground, or in a tree, or given to an animal. Thus, in an old book, published in 1611, by Ulrick Dominicus Balk, it is said that if you take some blood of a person sick with pleurisy, and pour it in an egg, which egg is then to be placed under a hatching chicken, so as to cause fermentation, and give thereupon some of this fermented blood to a dog or hog to eat, the sick person will recover, and the animal get the disease; somewhat like the devil in the gospels, who went out of the boy and entered a herd of swine.

Often, also, *number* comes into play as a medical agent. Three grains of pepper are to be used for a three-days' intermittent fever; four grains for a four-days' fever, &c. Far more important than number, however, is *position*, which, as we have already shown, is the mediating agency between qualities. The leaves of the hazelwood bush, for instance, are a purge; "but only," says Van Helmont, "when they are plucked from the top of the bush downwards, whereas, if they are gathered in the other way, from below upwards, they will work as an emetic. And it does not matter whether the patient knows how they were plucked or not, they will always work in the manner of their being gathered."

Superstitious as this may seem at the first glance, is it more supernatural than the fact known to every good housewife, that soups cooked, and white of eggs beaten into foam, must always be stirred or moved in the *same* direction, unless they are to spoil; or the fact known to every gardener, that trees transplanted should be placed in the same position towards the north which they occupied before. "One single back stroke of the magnet," says Swedenborg, "places all the particles of iron again into such a position that the spiral current cannot issue from it any more, and hence it ceases to attract."

In fact, all the phenomena which are the result of a causality-relation between objects of nature, are in nowise particularly distinguished from each other. We may view that relation as of a mechanical, chemical, electrical, magnetic odic, or telluric character; each subdivision of the one

relation being merely undertaken to facilitate a clearer comprehension of the one causality, and having its limits drawn altogether by the freedom of reflection. Nearly all of the phenomena, classified by Reichenbach under the new name of odic force, had previously been classified by Dr. Kieser, with many others, under the more general name of sideric phenomena, and by Van Helmont, Paracelsus, and Tritheim under still other names.

There is no justification, therefore, for drawing a valid line between this class of phenomena. All that is wanted is a reliable collection of such facts, whereof literature and every-day experience furnish abundant number. For "magic" is even, in these enlightened days, one of the most popular sciences, and common people insist that their magical medical prescriptions do not kill so quick as those of the regular science. Moreover, we have spiritualism, which, likewise, amongst numerous physiological phenomena, furnishes many facts which are purely the result of the reciprocal causality between objects of nature.

We have seen that to make a distinction between natural and supernatural phenomena, is an utterly arbitrary and unwarranted proceeding, so far as the causality-relation between the objects of nature is concerned. The second question remains, whether it may not be necessary to institute such a distinction between those phenomena which are the result of the relation existing between the Ego (self-consciousness) and the objects of nature.

That such an immediate knowledge of occurrences, which is not limited like all ordinary empirical knowledge by time and space, has ever taken place in human history or does take place, is a matter which each person may believe or not, as the historical data at hand may convince him or not, and so, likewise, is the extent to which such knowledge may be developed; but that it is *possible* may be best shown as follows:

When we consider the universe as a whole, each part whereof is both related to itself and related to all others, it is immediately certain that each part involves in its own construction, as it were, the conception of the totality. Now, if you ascribe to such part *immediate consciousness*, or instinctive knowledge of what occurs within itself, you will thereby give it the power of becoming conscious of all the occurrences within the whole totality. Every change within the totality would

effect a change within each part, and since in consciousness every change is brought to knowledge through sensation, any change within the totality or within any part of the totality would necessarily produce a sensation within each other part. Hence, to become aware of a change within any part of the universe, it would simply be requisite that a part of it should be able to recognize the sensation produced upon it by such change.

It is also clear why this instinctive knowledge should often err, and why it should require diligent practice for its development. For it is only after long experience and diligent study that we learn to distinguish between impressions made upon us, and even then we often mistake one sensation for another. The most practised musician will not at all times be able to recognize a tune through merely learning it. It is a well-known fact that an exquisite sensibility of this kind to internal sensations is always accompanied by a delicate, nervous organization, which may be either the cause or the effect of it. Hence we find it particularly developed amongst the people who reside near the North or South Pole. In the Scottish Islands, in Norway and Sweden, as well as in the islands of the Southern Ocean, we find whole families having and inheriting this marvellous gift of fore-knowledge, or second sight. Amongst the Laplanders and other northern people the highest degree of nervous susceptibility is manifested; probably as a result of long nights and consequent absence of sunlight. So little of self-determination have they to control their impressions, that, at the sight of a traveller from warmer regions, they will convulsively and unwillingly imitate all his motions, gestures, &c., just as passionate musicians will lose all control of their bodily movements, and often execute the most ridiculous grimaces.*

The extraordinary sensitiveness of the philosopher Swedenborg is a well-authenticated fact. Not only could he feel within himself what was passing at Stockholm on that famouos occasin of the great fire, but even the deaths of many persons were thus made known to him. We have said, could *feel* within him, for all somnambulists, prophets, and seers agree in stating that they do not see or hear

* The phenomena of Epilepsy, Catalepsy, Lycanthropia, St. Vitus' Dance, as well as the convulsions told of the Montanists in early Christian times, and of Methodists of the present day, all belong to this category, though we could not possibly suggest in the short space of this article their more particular explanation.

through their eyes and ears but through their heart and liver. Hence in scripture the liver is always mentioned as the seal of life; and even Plato says in his Timæus that the gift of prophecy was given to the liver, so that even our body might have something divine. This seeing and hearing through our inner body is precisely that immediate instinctive becoming conscious of what is in us, which we have mentioned as altogether distinct from the intellectual cognition by means of empirical knowledge. Van Helmont, having experienced a state of somnambulism after the accidental eating of a certain root, says: "I first had a feeling, as if the crown of my head were being laced tight together. Suddenly I experienced feelings as never before. I felt that I did not think with the brain, nor understand, know, or imagine in the ordinary manner; but I felt, to my great astonishment, *clearly, distinctly, and permanently* that all those functions were being performed around the heart and stomach. I felt this determinedly and clearly, and I remarked attentively that, while sensation and motion proceeded from the brain throughout the whole body, yet the whole power of thinking was concentrated in the region of the heart, as if the soul were there considering. Much astonished at this new mode of sensation, I only observed my thoughts and examined them as well as myself closely. I found that my thinking and considering grew in the meanwhile much clearer. There was blissfulness in that intellectual clearness."

If we allow for the lack of philosophical terminology which makes Van Helmont here use the word "thought" and "thinking," for instance—when he evidently meant merely to designate "immediate consciousness"—we have in this statement a very clear psychological description of the mode of this consciousness. The *blissfulness* is precisely the same which the Orientals seek in eating opium and hasheesh, which Europeans seek in rum and whiskey, which all sensual men seek in sexual pleasure, as they profanely call it, which the grief-laden labourer seeks in sleep; but which the strong, healthy, and good man only seeks in doing his duty. It *is the breaking through of limitations* which causes this bliss.

Of the peculiar nature of this immediate consciousness we have another instance in one of the most clear-minded of men, Ludwing von Voss, General Director of Hospitals in the great German wars against Napoleon, who, writing to a friend, confesses of himself: "Do not smile when I tell you that I

can feel whether some one has sat upon a sofa or a chair a half an hour ago, particularly if it was a person of strong vitality. Yesterday I felt that it was some one who had come from a great distance, and was very tired; nay, I know from the impression produced upon my whole being that he must have patiently tired out himself in the afternoon with mathematical calculations." "Within me a wonderful but unhappy faculty has developed itself, which enables me in my calmest state of mind to recognize all the pains and weaknesses of men with whom I come in contact, nay, to know when some one places the minutest fibres of his brain into activity. I often must make a wide circuit to escape persons I meet on the street, particularly if they are sickly. At my first entrance into a room I know what each one suffers from."

Moritz's Magazin fur Erfahrungsseelenkunde is full of similar facts, of which almost every person we meet can tell some circumstance. Stilling tells of a gentleman who, in a stormy, rainy night, in vain tried to go to sleep, an inner voice impelling him to go out over the fields. At length, unable to combat that voice, he followed his instinct, and arrived just in time to help a poor boy, who was vainly calling for assistance, in rescuing his father from imminent death. The horrible instances, so often reported by newspapers, of mothers butchering their children, and fathers killing their whole families, and then trying to commit suicide, are only to be explained by this utter loss of self-control, which makes the body a mere tool of the mechanical casuality-relation of nature. Hence such persons usually assert, with honest conviction, that they could not help committing their crimes, that they were impelled to it by a wicked demon. Bulwer has worked up this wonderfully impressive phenomenon in his Strange Story. There is no severer lesson against the harbouring of evil thoughts than that a mere evil thought in Margrave should lead another man to commit murder. For every evil thought, as the motion of a force, becomes part of the universal force of nature, and works out its evil. Hence we can actually feel the presence of evil thoughts in other persons, or grow warm and generous in the presence of sainted souls.

There is something terrible in the surrendering of our self-determination, and giving up our body to the working of the influences of mere nature. For as these influences develop the ferocity of the tiger, the bloodthirstiness of the lion, the

cruelty of the cat, or the cunning of the fox, so will they—when no longer controlled by reason—work out in man's body their mechanical effects. And what in animals does neither surprise nor shock us, in man becomes demoniac, for we cannot possibly consider him as an animal. Not the most obstinate materialist can stand this test. Even he will shudder to see man become the mere instrument of the forces generated in his body by the food he eats and drinks, and by the external circumstances which surround him; such as Vogl and Moleschott blasphemingly, theoretically assert all men to be.

The most frightful chapters of human crimes find their explanation only in this not possessing one's self, but being possessed. It is a well-known fact that even common night-walkers (somnambulists), otherwise of an amiable disposition, show in their trance condition a disposition to destroy and murder, and, usually, that which they hold most dear. A spirit of cruelty is awakened, which seems so utterly unnatural, simply because it is so utterly unhuman. Every day cases are reported of otherwise quiet, orderly people, suddenly butchering the very beings whom they most love—revelling in the shedding of blood, and in the piteous outcries of wives, husbands, and children, and taking the same pleasure in slowly butchering their own bodies. Persons whose nervous systems have been shattered and self-consciousness abandoned in the pursuit of the pleasures of voluptuousness, are generally the most cruel and inhuman. The terrible freaks of Nero, Tiberius, the Borgia, Cenci, &c., find their explanation in this every-day phenomenon.

An old French writer tells a story of a quiet, pious wife, who suddenly—it seems from a stoppage of menstruation—fell into fits of deep melancholy, which left her and returned with more or less regularity. In this condition the thought always arose in her that she ought to murder her husband, whom she deeply loved. The tortures which these murderous impulses produced in her she afterwards confessed were indescribable. Often she was also tempted to commit suicide, so that guards had to be placed over her. One day, when she seemed more quiet than usual, they allowed her to take a walk with her son. She took the smiling child by the hand, and went with him to a river, in order to drown both the child and herself. But, having walked up and down the bridge a few times, she walked quietly home, and henceforth was saved. She then

freely told all her troubles, and mentioned that every time she had been near committing a crime, a bright youth appeared to her, and told her to trust in God. Was not this bright youth the poor woman's own Psyche—her own bright Ego—protesting against ceding the body to the blind forces of nature, and claiming it as its own?

That material causes, physical diseases, stoppages of the body, sensual excesses, inordinate appetites indulged in, &c., often tend to bring about such a state of things, is not to be doubted. The freaks of many women, and their utterly unnatural mode of action, is often chiefly the result of physical disorder, the effects of which they have not trust enough in self-consciousness to overcome. A habit of blindly following physical instinct, likewise tends to surrender our body as a prey to its impulses. All writers on these dark and painful subjects of human life—dark and painful because they belong to our animal life, and show to what unnatural extent men are still controlled by that life, instead of controlling it—are agreed that all phenomena of this character are practised to greatest perfection amongst those people who have least self-consciousness. East India is the very paradise of witchcraft and sorcery.

There is, however, another class of men who vainly hope that, by surrendering self-consciousness, they may lapse into unity with the Deity instead of nature. Vainly, for there is no fact more clearly demonstrated by the history of these unusual phenomena, amongst all nations of the world, than that with the abandonment of self-conscious activity, the demon is not only likely but almost certain to obtain control over the body. All the phenomena of somnambulism, mesmerism, second sight, prophecy, &c., are the results of the absence of self-consciousness only, and man was created to be self-conscious, and sleep is his normal state when self-consciousness is suspended. Hence sleep offers precisely similar phenomena; but sleep refreshes and somnambulism weakens. Hence also the dreams in our sleep appear to us as not our own production. Like all these phenomena we ascribe them either to God or to the Devil. "In sleep," says Tycho Brahe, "our souls are with God." "Sleep," says Burdach, "is the melting together of life and soul—that is to say of self-consciousness and mechanical nature into animal consciousness." In the same way, and for the same reason, we hold the sudden "ideas"

which at times arise within us, to be not our own production, but sent either by God or the Devil, as the case may be. So also do preachers, who rely on "inspiration," as they call it, and are generally distinguishable by the nonsense which they utter, appear to themselves and to others as if another spoke through them. It is very difficult, however, to distinguish whether these results are worked by the good or the evil agency. Moses worked miracles and they were performed through God, but when Jannes and Jambres, to baffle him, worked the very same, they are said to have been moved by the devil. The Apostle Peter effected his miracles through the power of Christ, whereas the famous Simon worked by the aid of Beelzebub. And this Simon was by no means a common trickster, for he boasted: "If I were caught I could make myself invisible, and again at pleasure, appear present. If I resolve upon flight, I can pass through mountains and rocks, as if they were soft clay. If I throw myself down from a mountain, I reach the ground unharmed. If I am chained, I loosen my chains at will, and enchain my keepers. The doors of a prison open at my command. I can breathe life into images so that men hold them for living beings; at my beckon the ground covers itself with bushes, and new trees arise from out of the earth. I can show a twofold face and change myself into any animal, &c."* In like manner Leo, Bishop of Catevea, performed his miracles by the help of the saints, but the magican Heliodorus—no less pious a Christian than Leo—was reputed in league with demons. The wonderful performances of early Christians, told by Eusebius, Justinus, and Irenæus were all ascribed to the potent influence of the Holy Ghost; whereas, the no less strange miracles performed by the heathen were only ridiculed or condemned as acts of sorcerers. So also the marvellous stories told of Loyola, Xavier, and Francescus of Assisi, were unhesitatingly placed to the account of their piety, while the no less wonderful achievements of Virgilius, Klingsor, Merlin, Tritheim, and Faustus were pronounced the result of a compact with the devil; and whilst all the equally marvellous phenomena of modern spiritualism are credited, for variety's sake, to a countless host of so-called spirits.

But as yet we have only solved part of the second problem. We have only shown that immediate acts of cognition are possible; that there is a mode of obtaining empir-

* See *Recognitiones*.

ical knowledge which is unlimited by time and space, and which we claim has, therefore, a valid ground of distinction from the ordinary mode of cognition, in that it is not to be ascribed to self-consciousness. But there is a vast distinction between acts of cognition and acts of external causality, a distinction already alluded to.

Miraculous cures are the most frequent of these occurrences. Generally, they are not merely the result of the influence of one individual upon another, but likewise of the medical effect of external objects (transplantation, &c., usually having been used in connection with that influence). Thus witches have been known from time immemorial to cure through mere bodily presence, song, or word, but usually some other medical process has accompanied the process. Thus the King of Epirus cured diseases through the touch of his feet.*

The Emperors Hadrianus and Vespasian cured blindness through mere touch. The wonders achieved by the Montanists are well known to all readers of ecclesiastical history; as well as the miracles of Apollonius, who cured, for instance, a case of hydrophobia by causing the mad dog to come and lick the wound. The cures of Plotinus,† the great Neoplatonist, are also well known. In fact, the whole history of the church is full of such cases, not the least marvellous of which are the famous miracles performed at the grave of the Diakonus Paris. The last mentioned case is important as giving the clue to the wonderful influence which thus seems to emanate from the human body even after death, stronger on account of the decomposition than during life. The recent phenomena in Morzine are probably of a similar nature. *How* the influence of the body works these cures, it is the business of empirical science to establish through a collection of facts; we have merely shown that the influence cannot be of an immediate character, and lies, therefore, within the scope of empirical science.

Such an empirical science, based upon this influence, has but one of the modes of reciprocal causality between external objects, but a mode under the leadership of the human will was, indeed, established by Mesmer, and has been amplified and perfected by Deleuze, Rousillier, in France, Schubert, Ennemoser, F. Hufeland, Kluge, Eschenmayer, Passavant, Kieser, &c., in Germany, Cederschoeld in Swe-

* Plutarchus in Pyrrho.

† Porphyrus Plotini vita.

den, Van Ghert and Wolthers in Holland, &c. In our own country the matter is carried on in an utterly unscientific manner by the spiritualists.

So far, finally, as the working of spirit rappings, movements, &c., is concerned, but very few facts are established, and not near enough to say to what extent the influence emanating from the body can be made to move external objects. There is no reason why, as the magnet in the earth attracts through an unseen influence the needle of the compass, we also should not have in our body an influence to detract the needle from its usual direction when I direct that influence upon it through our will; but to what extent this influence can be made to overcome physical resistance it is as impossible to tell, as it is to say how much a person may succeed in lifting, or to what extent man may develop the nimbleness of his fingers, or the strength of his legs. It is a matter of pure empirical experience. There is only one absolute limit to this force. It cannot, in any instance, overcome the body of a self-conscious person, and hence all the arts of mesmerism shatter here. No person on earth can overcome a man, clear and strong in self-conscious rationality.

We have said that there are few facts of reported external causality exercised in an apparently immediate manner; and it is certainly curious that nearly all those acts resolve themselves into deceptions of the senses. Of the immense collection of anecdotes attributing wonderful deeds to wizards, devils, witches, &c., nearly all resolve themselves into such deceptions, or, in other words, into phenomena of mesmerism. But mesmerism always presupposes that the person mesmerized should himself surrender self-consciousness. One strongly mesmerised person influences a number of others, and makes them believe they see what they do not see. Even Lerchheimer notices this already. He makes a clear distinction between other arts of witchcraft and this phenomena of deception, which he calls Gaukeley. "Gaukeley," says he, "is working of the devil, whereby he blinds, confuses, and darkens the sight of man and animals, so that they do not see that which is, and see that which is not, or see that which is in other form than it truly is." Lerchheimer ridicules the idea that wizards or witches can influence the weather, or harm one's body or cattle. They cannot hurt, he assures us, any one who trusts in God. This distinction between mesmeric, deceptive, and actual

acts of causality of like character, has, indeed, been made at all times. Thus Jannes and Jambres are said to have merely made the Egyptian court *believe* that they saw the sticks change into snakes; whereas, Aaron actually did change them. Heliodorus takes up a stone and gives it to a soldier, who takes it for gold and can scarcely lift it. But soon the soldier sees that it is only rock and weighs scarcely four pounds. It is a common trick in all wizard stories that the magician goes to a church, and when the ladies come out makes them believe that they are crossing a large river.

Wizards always keep brilliant tables, but their guests get hungry immediately after rising, and this glorious state of tipsiness vanishes much sooner than would an actual intoxication. Virgilius, Klingsor, Merlin, Theophilus, Marshall, Luxemburg, Faust, and Wagner, all achieve their world-renowned tricks through this simple agency. Thus Faust once upon a time drove a large wagon full of hay drawn by two oxen through a narrow *two* feet wide and forty-nine feet long alley-way in Erfurt to the unbounded admiration of all the Erfurters. In like manner was the famous scene in Auerbach's cellar enacted as well as the calling up the shade of Helena and Paris before the Emperor Maximilian. They were mere tricks of mesmerism. Faust's scholar, Wagner, seems also to have learned the art well, for he made the people of Wittenberg imagine that they saw the whole tragedy of Faust performed upon an open field before their city, when he had invited them to come. A tragedy, in outlines not unlike that of Goethe's, seemed to be performed in open air, and it was only as the curtain fell upon a scene of hell's worse horrors, that the Wittenbergers discovered the whole to have been an illusion.*

That no person can be mesmerized who does not consent, is a well-known fact; clear self-consciousness is safe against all attacks of the devil, magicians, liver moods, and all other moods known to tend towards subjecting our body as a plaything to the forces of nature. We certainly can become, as Moleschott says we are, the creatures of what we eat, drink, and breathe, and it is only necessary to visit a lunatic asylum or prison-house, in order to witness the fair body of man, a flute upon which nature plays never aught but discords, precisely because the human body is an instrument

* See "The second report of Dr. John Faustus from the edition of 1594. Reprinted in Thomas Early's English Prose Romances."

which nature does not know how to play. Only self-conscious reason can play it, and when it; does, harmonies the most wonderful arise from it. All mankind and all angels in heaven shudder at the terrific sounds which mere nature causes to arise from our body; but God himself trembles in the ecstacy of love when the mission of his sainted Son has achieved success in another self-conscious reason, completely controlling the wonderful machine entrusted to it, and by its means wafting upwards pæans of glorious deeds of religion and morality.

ART. VIII.—1. *Articles of Impeachment against the President of the United States.*

2. *Speeches in Congress, &c.* March, 1868.

WE are very unwilling to speak of the Congress of the United States as we feel its conduct deserves; but the latter is of too grave a nature to be passed over in silence by any public writer. We shall not speak of it, however, as a politician. We are actuated by no partisan feeling against the party in power; Radical, Republican, and Democrat are all the same to us, except so far as we think that one does better or worse than the rest. We dislike no man, much less do we condemn him, for the party to which he belongs. In proof of this impartiality we can say, that although many years a citizen of the United States, and quite as warmly devoted to its interests as if we had been born in it, we have never voted for the candidate of any party, for the reason that we do not care to compete with the class of persons who do most of the voting. The vote of the most ignorant hod-carrier or professional burglar would have as much influence on the result of the election as ours; otherwise none would vote more cheerfully or more eagerly; that is, if we saw any prospect of preventing the election of ignorant, incompetent persons.

But under our present system there is no such prospect, and it is precisely for this reason—because it is the most ignorant, reckless, and vindictive class who choose our legislators—that the President of the United States now stands arraigned as a malefactor; although he cannot even be accused by his worst enemies with any serious offence—with any offence

calculated to imperil the least of the great interests of the country. We do not utter a word, however, as the champion of Mr. Johnson; the gentleman has no claim whatever upon us, save that of right and justice. We do not regard him as the friend either of literature or science; in short, there is nothing whatever in his tastes or character, so far as we are aware, which ought to prejudice us in his favour. Yet he has our warmest sympathy in his present position; because he is persecuted, insulted, and sought to be degraded without any real cause.

We do not indulge in the language of passion when we say that the conduct of Congress towards the President, thus far, has been most tyrannical and vindictive. Not content with depriving him of every vestige of power by downright usurpation, the dominant party now seek to set the stigma of disgrace on him by placing it on record that he was ignominiously expelled from the Presidency. It is not he they will disgrace, however, but themselves; on them and not the President will the infamy rest in the eyes of posterity.

In former numbers of our journal we have taken the pains to exhibit the opinions of the most eminent writers on international law, American and foreign, ancient and modern, to show that it was not the course of wisdom or patriotism, but of narrow-mindedness and despotism, to persist in governing the South by military law after the people in rebellion had completely submitted, and, in fact, were no longer able, even if they should be disposed, to make any serious resistance. We have shown that the most despotic monarchs have granted general amnesties under such circumstances to conquered alien races. But neither reason nor example has any influence on mere partisans who have no higher idea of legislation than the effect which they think it may produce on their party. It is idle to quote Grotius, Puffendorf, Vattel, Kent, and Marshall to convince such men, and we shall not put ourselves to the trouble in future. We may remind our readers, however, that those publicists that have felt most friendly to ourselves and our institutions have warned us against a species of tyranny and usurpation precisely such as that which Congress is now exercising with a high hand.

No one, it will be admitted, has done us more justice than De Tocqueville; no one has proved himself more willing to recognise our virtues, and give them their due meed of praise; but as a philosopher it was equally his duty to point out to us some of those defects in our system of gov-

ernment which, though inherent, might be guarded against by intelligent legislation, and he has done so accordingly. The party in power claim that because the people in some States continue to give them majorities it follows that they are right in putting the President on trial. This is the sort of logic to which De Tocqueville alludes when he indignantly exclaims: "I hold it to be an impious and detestable maxim, that politically speaking the people have a right to do anything."*

We trust there are few, if any, of our readers who need any proof of this, since they have only to remember that it was the people who put Socrates to death, who expelled and degraded Themistocles, and did many other atrocious and silly things of a similar character. In each case the minority had to look on with folded arms, if not with mute tongues; the divine Plato and his disciples, numerous as the latter were, and sympathized with by every intelligent and calm mind, could not save the philosopher from his fanatical persecutors. The majority were in favor of putting him to death, and it had the power of the despot to do so. "A *majority*, taken collectively," says De Tocqueville, "*is only an individual* whose opinions, and frequently whose *interests* are *opposed* to those of an individual who is styled a minority. If it be admitted that *a man* possessing *absolute power* may exercise that *power* by wronging his adversaries, *why should not a majority be liable to the same reproach.*"†

In the next chapter he shows how tyranny may be exercised in the United States by means of the law itself.‡ After fully discussing "the tyranny of the majority," he makes the following observations: "By this means habits are formed in the heart of a free country which may some day *prove fatal to its liberties.*" (p. 336.)

It ought not to be necessary to quote views like these in this country; but unhappily it is. There are large numbers who consider themselves highly enlightened that think it impossible for the majority of a representative body to be tyrannical. Not that the power of being so is denied to the majority; it is admitted that they possess the power, but denied that they are capable of exercising it unjustly or tyrannically, because the majority must be right!

A very energetic protest has been made against this theory by the minority in Congress who have voted against

* Dem. in Am., vol. i., p. 330. † Ib. ‡ Vol. i., p. 335.

the impeachment of the President; and although the majority refused even to hear it read, no dispassionate mind capable of forming an intelligent opinion on the subject will deny that posterity will honour those who made it, while denouncing the majority as a body of vindictive partisans, whose chief motive was to retain power. We do not know a single one of those whose names are appended to this Protest; but we most cheerfully transcribe it for future reference. It is the longest quotation we have ever given; but its length is by no means disproportioned to its importance:

"The undersigned, members of the Fortieth Congress of the United States, representing directly or in principle more than one-half of the whole people of the United States, do hereby, *in the name of law and justice*, and in behalf of those they represent, most solemnly protest against *the tyranny and injustice practised by the majority of the House, in violating the sacred right of free debate and unconstrained deliberations*, upon the greatest questions ever brought before an American Congress—the rules of the House made for the protection of the minority, and by a strict adherence to which the weaker party can only be protected from those irregularities and abuses which the wantonness of power is but too often apt to suggest to large and successful majorities—have been during this entire Congress, in violation of their truer spirit and intent, *wantonly and unprecedentedly suspended and set aside*—not upon a particular and pressing matter, but upon all pending subjects of legislation, so that by this reckless and arbitrary suspension of the rules and the wanton abuse of the previous question, the rights of the minority have been utterly disregarded, the House of Representatives *has ceased to be a deliberative body*, and the minority have been compelled to vote upon the most important questions without any proper or reasonable time for debate or consideration. To such an extent has this *dangerous and oppressive practice* obtained that measures affecting vitally the whole country and the dearest interests of our constituents, tending, as we believe, *to the subversion of our republican form of government*, in their very nature demanding of the people and representatives the most careful examination and scrutiny, have been hurried through the forms of legislation without being printed, without one word of debate or one moment's consideration; without, indeed, the opportunity of the undersigned to protest, except in violation of the then operating order, enforced by the majority, as the order of the House.

"These alarming abuses of power might not seem to demand this formal protest, if we were not forced to the belief that a determined intention exists with the majority to revolutionize this Government *by destroying the other co-ordinate branches, and vesting all the powers of the Government in Congress*, in the steps taken to depose the President of the United States. We are admonished that there is no end to these oppressive measures to cripple the power and *silence the voice of the minority*. The resolution was rushed through the House under the operation of the previous question. Referring the matter to the Committee on Reconstruction, the Committee, in hot haste, sitting when the House was in session, in violation of one of its express rules, considered, and by a strict party vote, adopted and presented it again to the House for its action. And then was exhibited one of the most extraordinary spectacles ever witnessed in a deliberative parliamentary body. Members were

allowed, some thirty minutes, some twenty, some ten, some five, and some one minute only to discuss *the most momentous questions ever presented in Congress.* Many could not even get one minute under the arbitrary rule of the majority; and more than half of those were of the party voting to enforce the previous question, who desired to be heard, were permitted only to print speeches in the *Globe*, after the question upon the resolution was decided, and which were never delivered in the House. No comment can demonstrate more completely than the facts themselves *the viciousness and illegality of such proceedings.* But this wanton and excessive use of the power of the majority does not stop here. While the Committee were in session upon the further proceedings to remove the President, and in anticipation of its action under the operation of the 'previous question' without debate, in violation of an express rule, new, special, and most extraordinary rules for the conduct of this proceeding, changing, without previous notice, the standing rules of the House, were adopted, to further limit debate, and more completely to place the minority in the power and at the mercy of the majority. Thus, while the majority of Congress are warring upon the other co-ordinate departments—the Executive and the Judicial—*endeavouring to subjugate and bring them both under the rule and control of Congress*, the minority of the House of Representatives are steadily and surely being stripped of all power, and their constituents deprived of all representative voice in the counsels of the Republic.

"We do, therefore, most solemnly protest against the indecorous and undignified haste with which the majority of this House inaugurated, presented, and rushed through, by a strict party vote, in plain and palpable violation of one of the standing rules of this House, a resolution demanding the impeachment of the Chief Magistrate of the people for alleged high crimes and misdemeanors in office, when the gravity of the charge, the character of the high office against which this attack was directed, and the unforeseen and tremendous consequences which might result therefrom to the peace and prosperity of the people, *called for the exercise of the calmest and wisest judgment*, the most unprejudiced and impartial deliberation on the part of those who had such proceedings in charge.

"We do most solemnly protest against this thrice repeated attempt *to degrade and break down one of the great co-ordinate branches of the Government*, through the spirit of party hatred and vengeance against the person who, by the Constitution, is in the rightful and conscientious discharge of its functions, thus consuming the precious time which ought to be faithfully devoted to an earnest effort to relieve the pressing wants of the people, a restoration of a torn and distracted country to union and good order, and to lightening the burden of a taxation which is pressing down all the energies of trade and commerce to the point of universal bankruptcy and ruin. We do again most solemnly protest against and profoundly deprecate and deplore any and *all attempts to array in hostile antagonism* to each other, any of the Departments of the Government upon the mere question of the constitutionality or construction of a law of Congress, the proper judisdiction and final adjudication of which belongs exclusively to the Judicial tribunals; and we, hereby, warn the people of the United States, *that the public liberty and the existence of free institutions are involved in this suicidal struggle, and that they are in imminent peril of utter overthrow.*

"We do further most solemnly protest against that wild and radical spirit of innovation upon the early and well-settled practice of the Government—a practice established by the men who framed the Constitution, and who best understood its spirit and meaning—which put the Chief Magistrate

of the Republic—the representative of the dignity and power of the people—at the mercy of one of his subordinates assuming to be Secretary of War in violation of his own pronounced convictions of the law; who has the unblushing effrontery to place himself in the unwarranted position of communicating directly with Congress,—in utter contempt of the authority of his superior, and with the deliberate purpose of resisting his authority.

"The undersigned, therefore, in character of representatives of the people, being deprived by *the despotic power of an inexorable majority of the high privilege of debate, that great instrument in the discovery of truth and the most cherished heritage of a free people*, do hereby solemnly and earnestly protest against these infractions of the rights of the people, and respectfully ask that this, their protest, may be spread upon the journal of the House.

Charles A. Eldridge, P. Van Trump, George W. Woodward, W. Mungen, Stephen Taber, George M. Adams, George W. Morgan, L. G. Marshall, D. M. Van Auken, Thomas Laurenz Jones, W. H. Barnum, John A. Nicholson, E. D. Holbrook, F. Stone, Charles E. Phelps, James M. Cavanaugh, Charles Haight, Lewis W. Ross, L. S. Trimble, R. D. Hubbard, J. S. Galladay, John W. Chanler. Julius Hotchkiss, Samuel B. Axtell, W. E. Niblack, W. S. Holman, Demas Barnes, A. J. Glossbrenner, Lawrence Getz, B. M. Boyer, Stephenson Archer, Albert G. Burr, James A. Johnson, James B. Beck, Asa P. Grover, J. M. Humphrey, John Fox, John V. L. Pruyn, Samuel J. Randall, James Brooks, H. McCullough, J. P. Knott, Charles Sitgreaves, M. C. Kerr, James R. McCormack."

There is nothing intemperate in this, nothing that is merely partisan, but much solemn truth; in all which characteristics it contrasts very strikingly with the documents emanating from the majority. Those who encourage Congress in its usurpations and tyranny inform us that the British Parliament is the ruling power in England; that as such it is 'omnipotent,' &c. But a little reflection will show that this is as fallacious as most other arguments adduced by the dominant party in justification of their vindictive and oppressive measures.

Parliament may introduce and pass all the measures it chooses; but they have no validity any more than so much waste paper until they receive the royal assent, which the sovereign may withhold whenever disposed to do so. If Parliament persists in enacting obnoxious measures the sovereign can dissolve it altogether; nor has the new Parliament any more exemption than the old from having its measures vetoed and rendered null and void. How can it be said, then, that Parliament is omnipotent, or that the King or Queen has no more power than our President?

Again, her Majesty has not only the power of appointing her own ministers, but also the power of dismissing them whenever she becomes dissatisfied with their services. She has

no need to consult Parliament on the subject. Besides, all her ministers are members of either House, including the Premier and principal Secretaries, so that if any of them are censured or assailed in Parliament they have an opportunity of confronting their accusers, and defending themselves. Not only does her Majesty change her ministers as often as she thinks proper—the only restriction on her conduct in that respect being that she may sometimes find it difficult to get others in their stead; but she authorizes her Prime Minister to be equally free in his selections. The Premier may make any one he chooses Principal Secretary for any of the departments, and can dismiss him just as readily without any authority from Parliament.

If the ministry thus chosen by the sovereign fail to carry any measure they introduce, they do not wait to be ejected from office; in nine cases out of ten they resign if there is the smallest majority against them. As for the Secretary of War, of State, or of the Colonies persisting in retaining office when the head of the government informs him that his services are no longer needed, that his presence in the cabinet is rather offensive than otherwise, there is no instance of the kind on record. If Mr. Disraeli, the present Prime Minister, informed the Secretary of State, the Chancellor of the Exchequer, or any other member of his cabinet, that he wishes to dispense with his services, he would surrender his portfolio at once. He would no more think of pursuing the course of Mr. Stanton, than he would force himself to be the tutor of a private gentleman who not only refused to receive his instructions, but forbid him to come near his residence. Such a proceeding would expose him to the derision and contempt of all who knew him; in short, it would be utterly impossible; and had Mr. Stanton not happened to get into the War Department, we think it would have been equally impossible in this country.

The principles of Mr. Seward have indeed considerable elasticity. Like the Vicar of Bray, he could modify them every month if a new President were elected so often. In short, his policy would assume any form that might be deemed necessary to enable him to retain office; in doubtful cases he could lean a little to both sides, alternately, like the Pythian goddess, so that when the proper time arrived he could interpret his language in accordance with accomplished facts. All this and a little more our Secretary of State would do without much scruple. Still we doubt

whether he would persist in continuing a cabinet minister after he was plainly informed by the President, as Mr. Stanton has been, that he had a decided objection to his belonging to the cabinet any longer. No: tenacious as our worthy Secretary of State is of the loaves and fishes, and fond as he is of writing long letters, and printing them in ponderous tomes at the public expense, we are sure that he would shrink from so low a depth of meanness as that to which Mr. Stanton has descended.

But to return for a moment to the parallel sought to be established between Congress and the British Parliament. It must be remembered that, in addition to the powers and prerogatives already specified, the sovereign has also the appointment of all the great legal functionaries, from the Lord Chancellor downwards, as well as of all the officers of the army and navy. Nor is it by any especial courtesy that Queen Victoria enjoys all those powers and privileges; they have been enjoyed and exercised by her predecessors for centuries. How absurd it is, then, to seek to justify the present disgraceful exhibition at Washington by the usages of the British Parliament! Only once has the latter body afforded any precedent for such proceedings; that is when it determined to crush the unfortunate Charles; and for this it was duly punished and humiliated by one of its own members. And very few thinking men, whether Englishmen or foreigners, have blamed Cromwell for driving out that fanatical, base Parliament at the point of the bayonet, as if they were a parcel of thieves and burglars.

But it is not alone the President the present majority in Congress would reduce to a nonentity; they would pursue the same course towards the Judiciary Department of our Government; and for this also some of their organs pretend to find a parallel in the usages of the British Parliament. It is true that the House of Lords is the highest court of appeal. But who constitute this high court? Certainly not political partisans and fanatics, but the most learned jurists in England—generally men who have distinguished themselves, first at the bar, and subsequently on the bench, and who have been raised to the peerage by different ministries as the reward of that distinction. These profound and eminent lawyers are very appropriately called the Law Lords; and this is the tribunal, with the Lord Chancellor at its head, which tries every appeal brought before the House of Lords. When it is remembered that the judges of England

are entirely independent even of the sovereign that they cannot be removed except on being convicted of bribery or high treason, it will be admitted that it is not likely that they will permit themselves to be swayed by partisan feeling when sitting in the House of Lords as a high court of appeal, whose decision will be criticised by the greatest minds, not only of England but of all Europe and America. And it is but rarely they have disappointed the confidence which they thus inspire. When appealed to in times of the greatest political excitement, against judgments rendered by the Court of Queen's Bench in prosecutions instituted by Government, their decisions have in many instances been in favour of the appellant. There are several memorable examples of this; but suffice it to mention that of Daniel O'Connell and his fellow "traitors," who, although convicted by the Court of Queen's Bench in Dublin of "high crimes and misdemeanors," and imprisoned in Richmond Penitentiary in that city, "were liberated by the House of Lords, Lord Abinger, one of the greatest English jurists of his time, declaring the jury empannelled by the Government prosecutors "a delusion, a mockery, and a snare."

If Chief Justice Chase has the wisdom and moral courage to avail himself of it, he has now an opportunity of rendering himself quite as illustrious as Lord Abinger; he has an opportunity of causing himself to be quoted as an authority in favour of constitutional government and the rights of man, against usurpation and tyranny, by the jurists of all future ages. We should be glad he would do so, if only for the honour of a profession which none hold in higher estimation than we do ourselves. It is his duty to bear in mind that it is not the President alone whom the present majority in Congress seek to degrade, but also the Judiciary branch of the government; that of which he is himself a member. But he cannot perform this duty—he cannot rank himself among the Abingers, Plunkets, Denmans, Storys, &c., except he severely rebukes some of the managers of the impeachment. He should tell men like Butler and Bingham that their conduct and language are disgraceful; that they are fit only for the atmosphere of the lowest police court, whose judge is only the representative of the thieves, burglars, and cutthroats who are brought before him for trial, and for whom he is supposed to have some sympathy. Nor should he fail to object to several who assume to sit in judgment with him, on the ground that they are notoriously prejudiced

against the accused. Most particularly should he object to "old Ben Wade," who, besides being fanatically prejudiced, is deeply and, we may add, disgracefully interested in the result of the trial. The Chief Justice would be perfectly justified in taking into consideration that a man like Wade would be a very unsuitable head for a great nation like this, even for one week. If our ambition were to make progress in swearing and almost every other species of vulgarity and coarseness—that is, if we wished to cause the rising generation to acquire the habits and manners of the Bowery, by the force both of example and precept—then, indeed, we should make Ben Wade our President as soon as possible. The Chief Justice may confine himself to a reason or two for the exclusion of Wade; it is sufficient to say that he is a prejudiced and interested party; for every intelligent person who is not prejudiced knows what that distinguished person is besides. In short, if Judge Chase will simply do his duty in his present position, his conduct will go far to prove that those—ourselves among the number—who have much more respect for the decision of the Supreme Court of the United States than for any bill passed by the Congress of the United States as at present constituted, have right and reason on their side.

We would fain hope that the Senate will yet vindicate its honour; that it will discard partisan feeling, and calmly remember what the world has a right to expect from it. We would earnestly urge it to look for an example to the Senate of ancient Rome, in Cicero's time, or to the British Law Lords, who, as we have shown above, have acted in the true spirit of Magna Charta, rather than to the Venetian Senate and its Council of Ten, whose infamous career we have sketched to its ignominious downfall in another article, in the present number of our journal. It is still in their power to make the farce pass off harmlessly, and save themselves from derision and mockery. The world already asks with sneers and scorn, what sense or consistency is there in allowing the President of the rebel confederacy to go free—him who did all in his power to overthrow the government—while vindictively prosecuting and persecuting the President of the United States, who is not even pretended to have made any effort of the kind. To this it may be replied that President Davis will also be tried, But has President Davis been allowed time to prepare his defence? Has he been refused forty days for that purpose? Has he not been

allowed more than a hundred days? We do not object to this; on the contrary, we hold that it is right that he should be allowed abundance of time. But we would have at least the same privilege allowed the President of the United States, who has done much more to save the Republic than to destroy it. In our opinion, if the time allowed him were extended to the 4th of March, 1869, it would be a much more sensible proceeding than to press forward in hot haste a proceeding so disgraceful, which, when the moment of reflection arrives, cannot fail to bring odium and contempt on its authors—not excepting those unprincipled and greedy demagogues who expect to profit most by the downfall of the President of the United States.

IX.—NOTICES AND CRITICISMS.

HISTORY AND TRAVELS.

The Huguenots; their Settlements, Churches, and Industries in England and Ireland. By SAMUEL SMILES, author of "Self-Help," "Lives of the Engineers," &c., with an Appendix relating to the Huguenots in America. 8vo, pp. 448. New York: Harper & Brothers, 1868.

MR. SMILES is certainly a useful writer. Hitherto he has occupied himself almost exclusively with books for the young, and no one has succeeded better in that department. His "Self-Help," and "Lives of the Engineers," are not merely interesting; they are replete with the best of all lessons—those learned from example. That poverty and the social disadvantages inseparable from it discourage hundreds of young men of fine natural talents, from attempting to attain eminence, is but too well known; and it is equally well known that the most brilliant successes in life may be traced to the influence of example. Mr. Smiles has undoubtedly done much good in this way; and, accordingly, he is entitled to an attentive and respectful hearing when he enters a new field.

The work now before us is very different from either of those mentioned; it is much more elaborate, more excitingly interesting, and more valuable. We have read several histories of the Huguenots by Protestants and Catholics, but not one that is altogether impartial. That now before us forms no exception to the rule. The author has a strong prejudice in favour of the Huguenots, or rather against their opponents; but he is not a bigot. He tries to be fair; with this view he examines numerous authorities, and in general he is successful. But even when his

sympathies lead him a little too far he does not fail to interest us by his discussions, especially as he seldom undertakes to decide any controverted point without presenting us some curious scrap of forgotten history, an extract from the private letter or journal of some celebrity, or a *morceaux* from some secret and mysterious protocol, attributed to King, Emperor, or Pope. Even when the genuineness of these may be somewhat questionable, they have still a certain attraction; for, if they are spurious, Mr. Smiles was not their forger; and there is no story so incredible but that time may invest it with interest. No one believes any longer that Romulus and Remus were nusled by a bear, as recorded by several classic historians; yet the bear story is reproduced year after year. And if Pagan Rome loses none of her *éclat* by slight mistakes on the part of the historians, there is no good reason why Christian Rome should suffer very seriously from similar blunders.

Precisely because Mr. Smiles discusses and examines as we have said, he often places the truth before us even when he is evidently somewhat biased. Thus, while in one place he severely censures the Pope and the Catholics for persecuting the Huguenots, he frankly admits in another that the chief representatives of the Catholic Church in France were disposed to deal gently with the heretics; in short, the conclusion which any disinterested reader would arrive at on perusing his narrative is, that the persecution of the Huguenots was much more political than religious. We do not remember any passage in which the author makes any admission of this kind in express terms; but we can easily show that some of his statements tend very strongly in that direction. Thus, in his account of the renewal of the persecutions in France, he informs his readers that "Cardinal Richelieu vigorously prosecuted the *war* against the Huguenots whenever they stood *in arms against the king*. His operations were uniformly successful. The Huguenots were everywhere overthrown, and in the course of a few years they had ceased to exist as *an armed power* in France. Acting *in a wise and tolerant spirit*, Richelieu refrained *from pushing his advantage to an extremity;* and when all resistance was over, he advised the king to issue an edict *granting freedom of worship and other privileges.*" (p. 180.)

Now, when we remark that the author impugns the motives of the Cardinal in the following sentences, we shall have given a pretty accurate general idea of the spirit in which Mr. Smiles writes. "The astute statesman," he says, "was doubtless induced to adopt this course by considerations of state policy, &c." It seems to us that when one performs good acts of any kind, it is at least charitable to presume that the motives that prompted them were good also. A little further on Mr. Smiles shows that another distinguished Cardinal was equally well disposed towards the Huguenots, as long as they remained peaceful and loyal. "Cardinal Mazarin," he says, "then Prime Minister, frankly acknowledged the

loyalty of the Huguenots. 'I have no cause,' he said, 'to complain of the little flock; if they browse on bad herbage, at least they do not stray away.'" (p. 131.)

Another much-abused personage receives some justice at the hands of Mr. Smiles. Every Protestant writer of a certain class who expresses any opinion of the persecutions of the Huguenots, seems to regard it as incumbent upon him to denounce Catharine de Medicis as the most intolerant and cruel of bigots. Mr. Smiles does not feel that he should entirely disregard so popular a habit. He tells us how, artfully, she contrived a marriage between her daughter Margaret and Henry of Bearn, king of Navarre, chief of the Huguenots. (p. 53.)

Was not this, after all, rather a proof of liberality than of bigotry? In our view bigoted mothers are more likely to prevent their daughters from marrying those of a different faith than to exercise any art in bringing the parties together, and making them love each other. But Mr. Smiles shows in another way that Catharine was neither so superstitious nor so ruthless as the controversialists represent her. He brings to light a letter of hers to the Pope which is but little known in English literature, and in which she defends rather than condemns the Huguenots. "The number of those who have separated themselves from the Roman Church," she says, "is now so great that they can no longer be restrained by severity of laws or force of arms." She then proceeds to speak of their "becoming more and more formidable in all parts of the kingdom," as a political body. She makes no bigoted or bloodthirsty comment; but on the contrary. "In the mean time," she says, "by the grace of God there are among them neither Anabaptists, nor libertines, nor any partisans of odious opinions." (p. 53.)

We need give no further instances of the fairness of Mr. Smiles in his discussions of topics, which are generally regarded as chiefly sectarian. Although we do not allow our Protestantism to carry us so far as our author goes, yet we know no Protestant historian of the Huguenots that indulges in fewer accusations, or makes more concessions.

But if we consider the work before us without any reference to Protestants or Catholics as such, we shall find that it sheds considerable light on the civilization of the nineteenth century; indeed, it teaches some lessons which the author himself had hardly contemplated. Thus our readers are aware that for some twenty years past it has been a favourite theory among a large, but not very profound or thoughtful class of writers, to ascribe everything great and good we have to the Anglo-Saxons. Mr. Smiles does not expressly contradict this, or say that we are more indebted to the French, after all, than we are to the Anglo-Saxons. But this is the tendency of his book, and we are rather inclined to think that he is right. He shows what large numbers of intelligent Frenchmen

belonging to all trades and professions, settled in England, Ireland, and Scotland. Not content with showing the extent of the migrations of this character which took place from time to time, he gives sketches of many of those Huguenot families who have attained literary, scientific, or professional eminence, or became the possessors of hereditary estates and titles in their adopted country.

This is a highly interesting feature in his book; and, unlike the Anglo-Saxon theory, it is founded on indisputable facts. Perhaps the most remarkable part of it is that large numbers of the descendants of those Protestants who left their native country through hatred of popery, as we are informed, are now, and have been for generations, ranked among the strictest and most pious Catholics. To this fact we can bear testimony from personal knowledge. We could give many instances, but we prefer to present our readers some of those families indicated by Mr. Smiles, which include those of the founders of some of the most important of the manufactories to which Great Britain owes so much of her wealth at the present day. The following extract affords pretty fair specimens of the manner in which the French have altered their names for the purpose of Anglicising them:

"The great French immigration which ensued on the last-named event* being the most recent, has left much more noticeable traces in English family history and nomenclature, notwithstanding the large proportion of the refugees and their descendants who threw aside their French names and adopted them in an English translation. Thus L'Oiseau became Bird; Le Jeune, Young; Le Blanc, White; Le Noir, Black; Le Maur, Brown; Le Roy, King; Lacroix, Cross; Le Monnier, Miller; Dulau, Waters; and so on. Some of the Lefevres changed their name to the English equivalent of Smith, as was the case with the ancestor of Sir Culling Eardley Smith, Bart., a French refugee, whose original name was Le Fevre. Many names were strangely altered in their conversion from French into English. Jolifemme was freely translated into Pretyman, a name well known in the Church; Momerie became Mummery, a common name at Dover; and Planché became Plank, of which there are instances at Canterbury and Southampton. At Oxford the name of Willamise was traced back to Villebois; Taillebois became Talboys; Le Coq, Laycock; Bouchier, Butcher, or Boxer; Coquerel, Cockerill; Drouet, Drewitt; D'Aeth, Death; D'Orleans, Dorling; and Sauvage, Savage and Wild. Other pure French names were dreadfully vulgarized. Thus Condé became Cundy; Chapuis, Shoppee; De Preux, Deprose; De Moulins, Mullins; Pelletiere, Pelter; Huzghens, Huggins, or Higgins; and Beaufoy, Boffy!"—P. 311.

Many of these are as good Catholics as we know; this is true, for example, of Higgins, Mullins, Smith, Miller, Waters, &c. Upon the other hand it may be remembered that there have been no more zealous champions of the Anglo-Saxon theory than persons bearing the names of King, White, Young, &c. Mr. Smiles shows that among the English and Irish peerage are many descendants of the Huguenots, and that there are but few of the remaining peers who have not intermarried with French families. This is true of the Duke of Bedford (Russell), the Duke of Devonshire (Cavendish), the Duke of Leeds (Osborne).

* The revocation of the Edict of Nantes.

Lord Eversly (late Speaker of the House of Commons) is descended from a Huguenot family; so is Lord Rendlesham; so are the Earls of Taunton and Romilly, and the Earl of Clancarty, Ireland. Among other descendants of the Huguenots who have distinguished themselves are the Laurens, De Farrens, Espenasses, Favers, Le Bas, &c., whose families are still well known in Ireland. Le Fevre, who taught the first school in Portarlington, Ireland, and who was the founder of the Charter Schools, had the same origin; so had Chief Justice Lefroy and Judge Perrin, of the Irish Bench.

Were we to mention all the descendants of the Huguenots who have distinguished themselves, we should fill pages with the mere names; but strangely enough it would be found, as already remarked, that the large majority have become Catholics. Among those who have done so recently is the celebrated Dr. Newman, of Oxford University, whose example is likely to be followed by a still more celebrated descendant of the Huguenots, namely, the Rev. Dr. Pusey, of the same University. We think we have said sufficient to show that the work before us is highly interesting. The volume appropriately closes with a sketch of the Huguenots in America, from the pen of the Hon. G. P. Disosway, and reference to all parts of it is greatly facilitated by a copious alphabetical index. Those who will read Thierry's "Conquest of England by the Normans," in connection with Mr. Smiles' "Huguenots," will be in no danger of ever being affected by the Anglo-Saxon mania, while those labouring under it at present may calculate on an effectual cure.

Spiritual Wives. By WILLIAM HEPWORTH DIXON, author of "New America," &c. 8vo, pp. 476. Philadelphia: J. B. Lippincott & Co. 1868.

JUST a year ago* we sketched the character of Mr. Dixon's "New America," showing what great admiration he had for the Mormons and the Negroes, especially for the former. We showed that he thought much more highly of the ladies of Utah, than those of America in general; that he regarded the latter as too independent, &c. In short, he informed his readers that our ladies have very little, if any, virtue, and he accounted for their viciousness by the statement that they are too scarce. Even in New York, Philadelphia, and Boston, there are not women enough; and hence there is more vice in those cities than in any of the great cities of the old world.

But among the Mormons it was altogether different; there, there was no vice, because the disparity was on the other side. Each man had from half a dozen to a score of wives; he watched all so well that they had no opportunity to be vicious;

* See No. for March, 1867.

and had it been otherwise there were not men to seduce them, or be seduced by them. The comparatively few men who were about had wives enough of their own—so many that they had neither the time nor the inclination to devote much attention to the wives of their neighbours; and accordingly Utah was quite a virtuous place!

Some eighteen chapters of "New America" were devoted to such logic as this; and they were duly interspersed with highly laudatory descriptions of the male and female saints, especially of the latter, who were represented as very good specimens of the sex. Although Messrs. J. B. Lippincott & Co. were never very discriminating in their publications, but were actuated chiefly, if not solely, by the question of dollars and cents, we thought they ought not to have put their imprint on a book that grossly insulted the women of America of all ranks, conditions, and creeds, with the sole exception of the Mormon women.

But "New America" was a respectable and inoffensive work compared to that now before us. It has been denounced by every respectable literary journal in England as utterly unfit for publication. In his former publication the author confined his glorification of licentiousness and vice to his chapters on the Mormons of Utah; but his present performance treats of nothing else but licentiousness and lewdness. He has searched Europe and America for illustrations of unbridled lust and debauchery, and given us the results of his researches in "Spiritual Wives." In other words, he has collected all the "spicy" scandal and obscenity he could find, and dished up the loathsome compound to us in this volume, taking care not only to repeat his charges against the women of America, but to exhibit them in a still more offensive light than he did before. But it seems that nothing of the kind is too indecent for the imprint of Mr. Lippincott. We do not know that the new book has had anything to do with the separation which has recently taken place between that gentleman and two or three of his partners in the publishing business; but if it has we cannot wonder, but rather think they did well to incur no part of the odium of "Spiritual Wives."

If a man is vicious in private—that is, disposed to practise the Mormon morality—it is a serious defect in his character; but he is harmless and excusable compared to the person who, not content with being licentious, glories in his licentiousness, and does all he can to induce others to follow his example. We do not pretend to know what may be the private practices of either Mr. Dixon or his American publisher, nor is it any of our business to inquire. For aught we know both may be as chaste as Cæsar's wife, but their book is obscenely vicious. No moralist worthy of the name will deny that it is less reprehensible on the part of an author to be immoral in his personal habits than in his writings, because in the former case he does much less injury to society than in

the latter. Nay, it may be admitted that one who is an advocate of morality in his writings makes amends to society, at least to a certain extent, for having sometimes allowed his passions to control his reason in private life. Juvenal, the most powerful of the Roman satirists, was by no means a Stoic in his relations with the fair sex; he is greatly misrepresented if he did not appreciate their charms as much as most of his contemporaries, but he respected public decency and admired virtue nevertheless. Accordingly, who that is acquainted with his satires does not forgive him to-day for his private weaknesses? Even Seneca himself was not a more severe moralist than was Sallust in his writings, although the latter is said to have been expelled from the Senate-house for having influenced his neighbour's wife according to the Mormon plan. If the author of the *Bellum Catilinarium* was really guilty of this offence, he made no boast of it, but, on the contrary, denied it to the last; if his conduct was vicious in general, he was not guilty of the baseness of publishing in his writings the names of all the ladies who had favoured him with their confidence. So far as we know, it is only modern authors who practise this sort of gallantry; and, accordingly, we presume it may be ranked among the "modern improvements."

Be this it may, no one makes freer with male and female names than Mr. Hepworth Dixon. We readily admit that a large number deserve to occupy the position they do in his pillory; but it is not as a punishment that he holds them up for exhibition in this manner, but rather as a reward for their "progressive" spirit and "independence," and apparently as an encouragement to others to follow their example. None who would accept our author's character of the women of America could wonder if half the States of the Republic were Mormon States. After telling his readers what are the consequences to which lewd women have to look forward in respectable and well-ordered countries like England and France, he proceeds to show that there is no such restraint in this country; that the ladies are so scarce with us we are obliged to give the few we have their own way in everything, especially the right of loving and caressing as many men as they choose!

"In the United States it is not so. The great disparity in the two sexes, which in that country *makes the female master of the situation*, has deprived society of the *conservative force* engendered by *fear and shame*. No woman in that country *needs to care whether she offends or not*. If she is right in her own belief *that is enough;* she is hardly more responsible *to her lover than to her groom*."—*Spiritual Wives*, p. 381.

According to Mr. Dixon, all this is not only allowed but encouraged. "Free love," he says, "instead of being universally condemned, has in America its poets, orators, and preachers; its newspapers, lecture halls, excursions, picnics, colonies, &c." (Ib.) After making some further statements of the same character our author proceeds to give long extracts

from "poems" on "Free Love," "Free Marriage," &c. What morality, or decency, is to be expected in a country where the women have neither fear nor shame? Accordingly there is a large part of "Spiritual Wives" which is too obscene to be quoted even as a specimen of nastiness calculated to excite the scorn of the reader. Whole pages are filled with the boasting, indecent confessions of unprincipled profligates, who, although highly praised by our author, would be no more allowed into respectable society in New York, Boston, or Philadelphia, than thieves or burglars.

We cannot sully our pages with extracts from such a work; it must suffice to give the titles of some of the chapters—such as the following: The Abode of Love; Within the Abode; Gospel Love; Confession of Father Noyes; Worden's Confession; Pious Courtship; Noyes on Spiritual Love; Heavenly Bridals, &c., &c. In short, if Mr. Dixon is to be believed, America is a sort of Free Love brothel, from one end to the other. All classes and creeds, the old as well as the young, indulge in Free Love; and all who come amongst us run the risk of being ruined in their morals.

Yet the truth is, that no people are more largely represented at Utah than the countrymen and countrywomen of Mr. Hepworth Dixon. It has never been our habit to disparage the people of any country, but although we have never said so before, it is beyond question that, as a whole, the women of America have far more delicacy and virtue than the women of England. When Daniel O'Connell used to say in his public speeches, in reply to the abuse of the *London Times*, that English women in general were mothers before they were wives, and rather boasted of their "love children," we thought he exaggerated the facts. Even now we believe there are virtuous, good women in England—as exemplary specimens of the sex as are to be found in any other country; but we do not hesitate to affirm, that, if a hundred American women, taken indiscriminately from the respectable class of society, be compared with a hundred English women, taken, in a similar manner, from the corresponding class, at least a dozen of the latter will be found of "easy virtue," or in favour of the Mormon system, for every one American woman who has the same failing.

Churchman's Calendar for the year of our blessed Lord Christ, 1868. Designed to exhibit an actual View of the Holy Catholic and Apostolic Church in all the world. No. viii. 24mo, pp. 264. New York: General Protestant Episcopal Sunday School Union. 1868.

We have seen some "High Church" criticisms on this little volume, which, we think, neither evince good taste nor Christian feeling. It is all wrong, according to the "evangelical" critics, because it has not excluded the Catholic and Greek hierarchies, and occupied their places with those of about ninety so-called Christian sects which can boast of "the

modern improvements." It seems the Mormon Church would have been more acceptable to our new evangelists than that "effete institution" called the Church of Rome. Curiously enough, because the compiler had better taste and a more enlightened liberality than this, he is sneered at as a "bigot." No wonder that those who preach in this style should be occasionally arraigned for being busybodies, and minding other people's business instead of their own; nor can we deny that they deserve to be publicly rebuked by their bishops.

Need we say that it is not the learned of the Protestant Episcopal Church who evince this narrow-minded spirit towards the two ancient branches of the Christian Church. It is not the spirit of the great theologians of Oxford and Cambridge; and we think that every unprejudiced reader will admit that, in imitating the example of those renowned institutions, the General Theological Seminary of New York, one of whose professors is the editor of the Churchman's Calendar, is in no danger of incurring the charge of bigotry in the estimation of any enlightened community.

The Churchman's Calendar confines its hierarchical information to "lists of the Episcopate of the Anglican, Gallican, Russian, and Oriental branches of the Church, corrected as far as practicable up to the date of publication." True it gives the names of ninety-two other sects, all of which are more or less "evangelical." But the most unpardonable "bigotry" of all is evinced in those pages in which we have the members of the Sacred College, with dates of birth and appointment of the Cardinals, &c.

A still more "bigoted" performance, if possible, is to indicate the Catholic provinces in the United States, and to speak respectfully of the Catholic bishops and archbishops. Thus, for example, under the head of "archbishops," we have the following: "1. BALTIMORE. Most Rev. Martin John Spalding, D.D.; consecrated September 10, 1848; translated to this diocese May 6, 1864. This Archbishop is the first ecclesiastic in rank in the United States." If it had been added that there is no ecclesiastic anywhere that better deserves his rank, it would have been only the simple truth, but would no doubt have been very "bigoted." In a word, if it be low churchism to respect and honour those who deserve to be respected and honoured, then we glory in belonging now, as we always have belonged, and our fathers before us, to the Low Church. We esteem and regard Archbishop Spalding, the Catholic, quite as much as we do Bishop Potter, the Protestant, and that is emphatically much, for when a foreigner and a stranger more than a dozen years ago, we found the latter a kind, generous friend.

A Journey in Brazil. By Professor and Mrs. LOUIS AGASSIZ. 8vo, pp. 540. Boston: Ticknor & Fields. 1868.

HAD this interesting work fallen into our hands in time it would have afforded us pleasure to review it, and present our readers some specimens of the good things it contains. As it is, we can only say, in general terms,

that none who take any interest in the Empire of Brazil, its productions, and manners, and customs, or in the scientific views of one of the greatest naturalists of the present day, should fail to read this tasteful and instructive volume.

EDUCATION.

Catalogue of Mr. Van Norman's Boarding and Day School for the Education of Young Ladies. Organized in 1857. Rev. D. C. VAN NORMAN, LL.D., Principal.

IT is now six years since we examined one of Dr. Van Norman's catalogues.* As our readers may remember we were then well pleased with the general system of female education which it embodied. The pleasure which we felt and expressed was not a little enhanced by the fact that we knew from personal observation that there was no theory in the catalogue which was not carried into practice in the School.

The catalogue now before us is that for the last scholastic term, and it affords an additional illustration of the adage, *Discemus in docendo.* In the present instance, also, we have had an opportunity of comparing theory with practice. We have seldom spent two hours more agreeably than we did at a recent visit to Dr. Van Norman's school, for which privilege we were indebted to the politeness of the Principal, in favoring us, as well as other friends of education, with an invitation to see any of the classes whenever we found it convenient, and felt disposed to do so. From our former visits, years ago, we had expected much; and yet we can assure our readers that we were surprised, nine or ten days ago, at the progress made; not that we recognized any of the students who were there during our former visits, most of whom, if not all, are now married. But the system of training, both physical and intellectual, pursued from the primary to the highest class presented a marked improvement; and we need hardly add that the results, as indicated by the superior intelligence of the students, presented a corresponding improvement. The teachers are not only thoroughly educated; the ladies, as well as the gentlemen, understand the science of teaching, showing that they have been selected by an experienced and discriminating educator, whose standard is all it ought to be.

We were present at the recitations of several classes, whose studies embraced reading, arithmetic, philosophy, Latin, &c. Our readers are aware that it is quite as much our habit to criticise as to commend, when we cannot do the latter conscientiously, and we have always regarded it as only spurious gallantry to praise as superior intelligence in female students what we should regard as mere smattering in male students. This

* *Vide* No. for March, 1862. Art. "Female Education; Good, Bad, and Indifferent."

would be no compliment to the sex; it would certainly do them no good, if it would not do them harm. But we really had no criticisms to make during our recent visit. When about to leave, perfectly satisfied with the system of the school and its results, the Principal remarked to us, with his usual modesty and politeness, that if it were agreeable and convenient to us to stay a little longer, he would be pleased to have us present at some of his classes. We readily availed ourselves of the Doctor's invitation, and we exaggerate nothing, nor do we indulge in the mere language of compliment, when we say that we found this a veritable privilege.

First the young ladies read passages in Pope's Essay on Man, and, in reply to questions from their instructor, very intelligently and happily explained some of the allusions of the poet. This pleasant exercise was followed by a parsing lesson, which was, undoubtedly, the best specimen of that very important branch of instruction which we had witnessed for some years. Finally the Doctor conducted us to his Latin class. The lesson happened to be the opening of the second book of the Æneid; the young ladies translated about a hundred lines with such ease and accuracy that we confess we were not a little surprised. We could not help remarking, at the close of this highly interesting and creditable exercise, that, although we have sometimes the gratification to be present at a college class in which the Latin is spoken fluently, we have seen no class of young men in any of our best institutions translate Virgil more correctly or more elegantly than the young ladies we had just heard.

In short, nothing that could be called hesitancy occurred from the beginning to the end of the lesson, except in one instance; this was caused, not by inability to translate, but that delicacy which is inherent in woman, and whose place cannot be supplied by any amount of learning. All went admirably until it came to the well-known line which concludes the poet's beautiful description of the famous wooden horse destined to destroy Troy; we quote with this the preceding hemistich, so that the sense may be complete:

—— penitusque cavernas
Ingentes *uteri*que armato milite complent.

As "uterum" can only be properly rendered by "belly," the young lady preferred to be considered ignorant of the sense of the passage rather than pronounce in the presence of men a word which it must be admitted is seldom heard at the present day from ladies' lips; nor did any of her fellow-students offer to correct her, obviously for the same reason. Dr. Van Norman removed the little stumbling-block in a very judicious and graceful manner; and the lesson proceeded as if nothing had happened.

There was no smile or titter, such as young ladies of less culture could hardly have refrained from under similar circumstances. The incident was a very trifling one we are well aware; at the same time it struck us very

forcibly as illustrating the power of true education in imparting strength and firmness to the mind. Respectfully and earnestly attentive as we were to every word translated, we could not help recalling the words of the good and amiable Fenelon. "It is ignorance," he says, "*that renders women frivolous.* When they have arrived at a certain age *without habits of application*, they *cannot acquire a taste* for it; whatever demands continued application fatigues them."*

We should not do justice to our own feelings did we close even so brief a record of our recent visit, without giving some expression, however inadequate, to the pleasure we derived on the same occasion, from a glance at the studio of Mrs. Van Norman. Not wishing to disturb the students, we took no notes of the several fine pieces, chiefly landscapes, that hung around the wall, giving the studio an appearance suggestive of what poets love to describe as a miniature paradise. Years ago some of Mrs. Van Norman's pieces attracted our attention at one of the annual exhibitions of the Academy of Design; and we spoke of them in this journal as among the best of their kind on the catalogue of the Academy. To this we need hardly add that her paintings, which are intermingled with those of some of her best students, form one of the most attractive features of the Van Norman School.

Catalogue of the Officers and Students of St. Vincent's College, Westmoreland County, Pa., for the Academic year 1866–67.

When we alluded, incidentally, in one of our recent articles on Commencements of Colleges, to what education and civilization, as well as religion, owe the Benedictines, we were not aware that that illustrious order of educators had yet established any of their institutions in this country. A friend informed us soon after, that they have a college in Pennsylvania which compares favourably with the best in the country, and his statement is corroborated by the catalogue now before us. From this we learn that St. Vincent's College was founded in the year 1846, by the Right Rev. Boniface Himmer, O. S. B., of St. Vincent's Abbey; that it was this dignitary who first introduced the order into the United States, and that the institution is still under his immediate supervision. St. Vincent's maintains three distinct courses of study—the ecclesiastical, the classical, and the commercial. The Faculty consists of twelve clergymen, including the President, and nearly an equal number of lay brothers. The majority of the former are graduates of some of the most celebrated universities of continental Europe; to which it need hardly be added that they are eminently qualified for their respective positions. The institution possesses the advantages of an extensive library, and a complete chemical and philosophical apparatus. It is beautifully situated in the

* Essai sur l'Education des Jeunes Filles.

western part of Pennsylvania, eight miles from Greenburgh, and easily accessible by the Central Railroad.

It is in secluded but elevated, healthy situations of this kind that the Benedictines have educated most of their celebrated pupils; for we may remind our readers that even in the time of Pope John XXII., who died in 1334, they had already educated 24 popes, 200 cardinals, 7,000 archbishops, 15,000 bishops, and 15,000 abbots of renown. Nor were their teachings limited to ecclesiastics. The great and illustrious in every rank and department have been numbered among their alumni, including 20 emperors and 10 empresses, 47 kings and more than 50 queens, 20 imperial princes and 48 royal princes, &c., &c. This may well seem incredible; but the number of authors and learned men belonging to the order would, if stated, seem still more incredible; yet no facts are more fully attested by Protestant and Catholic writers. Every intelligent student of French history is aware that Alcuin, the founder of the University of Paris, which formed the basis of all the great literary and scientific institutions of France, was a Benedictine; and that Protestant England is as much indebted to them as Catholic France, is sufficiently shown by the fact that the famous Anselm, Archbishop of Canterbury, and the Venerable Bede, were Benedictines.

When we remember monks like these, and the incalculable good they did, not alone for their contemporaries but for modern civilization in its whole extent, we should be ashamed of ourselves if we allowed our Protestantism—which, we must confess, is a doubtful authority at best—to prevent us from awarding them the honour that is justly due to them as benefactors of mankind.

Catalogue of the Officers and Students of the Seminary of our Lady of Angels, Suspension Bridge, N. Y., for the Scholastic year 1866--67.

We do not take up this Catalogue with the less good will or respect because it is that of an institution devoted chiefly to the education of candidates for the priesthood of the Catholic church, but the contrary. If some of our readers be displeased with us for this we are sorry for it; but we shall never be prevented from doing what we think just and right by the fear of sustaining loss, or incurring censure. We are now pretty well used to such orders as "Stop your review from me—it is Popish," &c. We rather pity than dislike those who write to us in this strain. Actuated by this feeling we sometimes try to reason with them, and we are glad to say—quite as much for their sakes as our own—that we occasionally succeed; the grumbler at our "Popishness" frankly admitting that he was wrong, that he wrote without reflection, &c.

Not only does it afford us pleasure to see Catholic seminaries flourish, but we should be glad to see them sustained by the State. We hold

that this should be the feeling of every citizen who takes any interest in the welfare of his country, or in the advancement of civilization, since it is undeniable that no clergy exercise a more powerful influence over their people than the Catholic priesthood; and this being admitted, it must also be conceded that, in proportion as the education of the priests is of a high order, is their influence beneficial both to the State and to society. Accordingly, the wisest and most distinguished Protestant statesmen have been in favour of granting liberal subsidies to Catholic colleges. We need only mention, as instances, Pitt, Fox, Sir Robert Peel, and Lord Palmerston. Among the most eloquent appeals of these enlightened statesmen are their speeches in favour of endowing Maynooth College; and it is but seldom they have failed, even in the most bigoted times, to get a majority in both Houses of Parliament, at least for some aid. Prussia, the most enlightened of the Protestant States of Germany, has pursued a similar course; and should a Republic be less tolerant or less liberal than a monarchy?

We do not know, however, that the institution which issues this Catalogue desires any aid from the State; we are not aware that it makes any further proposition to the public than to offer its services in a legitimate way to those who appreciate them. Judging from all the information we have been able to glean from different sources, and from the pamphlet before us, we have no reason to doubt that it is destined to prove eminently successful in its good and noble object. Although only of recent origin, the Seminary has already suffered severe trials. It was founded in 1857 by the Right Reverend Dr. Lynch, the present Bishop of Toronto; but just as all the difficulties more or less incident to a youthful institution seemed to have been overcome, in 1864 the buildings of the Seminary took fire and were completely destroyed. The good fathers were grieved at this disaster, but they lost no time in repairing it; and as is usually the case under such circumstances, the new buildings are much superior to the old. We learn from the Catalogue that "the whole edifice is of a superior quality of gray limestone, and is built in a most solid and substantial manner. At present it measures one hundred and fifty feet in length and one hundred feet in depth, and is five stories high, besides the basement. The experience of years has taught us what is necessary for a suitable seminary building; hence, when erecting this, we endeavoured to construct it so as to serve all seminary purposes. Thus the different apartments, such as study hall, dormitories, refectory, and class halls, are all arranged with the view of securing the health, comfort, and progress of the students."

Ten clergymen, including the Rev. President, constitute the faculty. All have been chosen by the Bishop of the diocese for their peculiar qualifications for the different chairs which they respectively fill; and it seems from the number of students, from nearly all parts of the country, who attended during the last session, that the institution is appreciated

accordingly. We intend to give our impressions of the system of instruction pursued at the Seminary next September, in our annual article on commencements of colleges; in the mean time we have no hesitation in ranking it among the best institutions of its class in this country.

Elements of Physical Geography, together with a *Treatise on the Physical Phenomena of the United States;* illustrated by one hundred and fifty Engravings and thirteen copper-plate Maps, executed in the first style of the art. By JOHN BROCKLESLY, A.M., Professor of Mathematics in Trinity College, Hartford, Conn.; and author of Elements of Meteorology, Elements of Astronomy, &c. Large quarto, pp. 164. Philadelphia: E. H. Butler & Co. 1868.

DURING the last eight years it has been our privilege to examine many excellent school and college text-books bearing the imprint of E. H. Butler & Co.; but we can truly affirm that no work on Geography has reached us from any source which is worthy of comparison with this. The author is certainly entitled to the distinction of having made an important step in advance of all his competitors in this country. He presents the student a large amount of interesting and valuable information which is not to be found in any other American Geography that we have seen; and what is more he presents it in a form well digested and admirably arranged. In the first place, the letter-press traces physical geography to its combinations with astronomy and geology in a manner well calculated to render each of those sciences attractive to the young student; and the pictorial illustrations, most of which will be new to those confined to the geographies in common use in the United States, are of such a character—well engraved and striking—that they cannot fail to impress on the memory the principal facts and phenomena to which they relate.

Yet in our estimation the maps form by far the most important feature of the work. These, be it remembered, do not merely represent the relative bearings of countries, their boundaries, rivers, mountains, &c., &c. This will be sufficiently understood from the titles of two or three, namely: Map of the World, showing the distribution of volcanoes and the regions subject to earthquakes; Hydraulic Map of the World, showing the oceans, seas, lakes, and river systems; Map of Winds and Hurricanes, showing their distribution over the globe and their influence on the routes of navigation; Meteorological Map of the World, showing by isothermal lines the mean annual temperature of the air of the earth's surface; Zoological Map of the World, showing the distribution over the globe of the principal birds and reptiles; Ethnographical Map of the World, showing the distribution of the principal races of men, &c., &c.

It is not alone students whom these maps will interest and instruct; there are few adults so learned but that they will derive profit from examining them; and the same remark will apply with more or less force to every feature of the work.

1. *An Improved System of Geography, designed for Schools, Academies, and Seminaries.* By FRANCIS MCNALLY. Quarto, pp. 110. New York: A. S. Barnes & Co. 1868.

2. *The Republic of Liberia; its Geography, Climate, Soil, and Productions. With a History of its Early Settlement.* Compiled by G. S. STOCKWELL. 16mo, pp. 299. New York: A. S. Barnes & Co. 1868.

WE think these two works ought to go together; they are worthy of each other, and we feel constrained to add that they are also worthy of their publishers. Yet, we are sorry to say, we cannot recommend either, however willing we should be to oblige the Messrs. Barnes & Co. If our opinion of one publication or the other were asked, we could not possibly speak favourably of it, because we could not permit ourselves to deceive those who honour us with their confidence. For this reason we confess we have often told our friends, in reply to their enquiries, that we could not recommend the so-called "Improved System of Geography" until it is "improved" a good deal more than it is; indeed, it does not contain a map or a page, and but very few questions or answers, which do not need improvement in one way or other.

So fully convinced are we of this, that when we saw it represented in an advertising sheet, issued by the publishers, entitled "The Educational Bulletin," that the Christian Brothers "have adopted Monteith and McNally's Geographies, *by edict of the Provincial of the order*,"[a] we thought there must have been some mistake. Surely, thought we, the Provincial of the Christian Brothers has issued no "edict" in favour of any such "Geographies;" if he has done anything that could bear such a construction, even by implication, it is because he had no time to examine them, but took the word of some interested party, whom he supposed would not deceive him. We felt so certain of this that we took the liberty of asking the gentleman the next time we saw him, and he authorized us to inform our readers that there was no foundation for the statement alluded to; that in a few instances the works in question may have been introduced into the schools under his jurisdiction, but that those in general use were Mitchell's Geographies; and that it was his intention that the latter should be used exclusively in all the institutions under his charge—at least that the Messrs. Barnes would have to seek an edict elsewhere for their "Improved System."

Indeed, had the gentleman done otherwise, we should have regarded his taste as much degenerated. We readily admit that there is no better judge of a geography or atlas; but precisely because this is the case he wants none of the "Monteith and McNally Series." In order to understand that he is right in this, it is only necessary for any intelligent educator to examine the Geography now before us. Being a "revised

[a] See No. for October, 1867.

edition" of "an Improved System," it ought to serve as a good specimen of the whole series, especially as it is, we believe, the most "advanced" number (5) of it. A glance at the maps and "cuts" is sufficient.

We may well be thankful for the work on Liberia, containing as it does so many literary and oratorical gems, which show how grossly the Negro intellect has been misrepresented by interested and malicious parties! Those who were slaves in Southern plantations only a few years ago are now capable of instructing us with pen and tongue, not merely in newspapers or other ephemeral publications, but in our school books. In making these remarks we may seem to burlesque the performance entitled "The Republic of Liberia," but such is not the case; we have no disposition to treat it otherwise than fairly.

In order to satisfy the skeptical that we do not exaggerate the high claims set up for the Negroes in this volume, it is sufficient to quote a remark or two from the compiler's preface. Lest we might suspect that the "gems" alluded to are spurious, we are gravely informed that the Liberians have a college at which inaugural addresses, &c., are delivered, which "would do *credit* to any in this land for *rich* and scholarly thought," and afford "conclusive evidence to the world that there are men of African blood who are competent to fill the *highest positions* where *cultivated intellect and brilliant talents* are required."

What a loss we have sustained by the withdrawal of such brilliant intellects from amongst us! It is true that we may still avail ourselves of their superior wisdom if we will only study works like that now before us. We are told in the same preface that the new negro "nation" "has a form of government *more in harmony with the teachings of divine revelation*, in its structure and application to the well being of the people, *than that of any human government.* In this respect it may be said to present a *model* even in its youth to the old nations of Europe and Asia *worthy of imitation.*"

In proof of all this we are presented with the "Inaugural Address of President Benson," "The Original Constitution of the Republic of Liberia," &c. Of course these are model performances. What a pity it is that we have not a Negro President in Washington! Had Andrew Johnson only taken some lessons from his Excellency, Stephen Allen Benson, he would never have been guilty of those "high crimes and misdemeanors," and Congress could have been otherwise engaged just now than impeaching him. Be this as it may, we would much rather recommend the works before us to the citizens of Liberia than to those of the United States. They are certainly better calculated for negroes than for white people.

A New Manual of Astronomy, Descriptive and Mathematical, comprising the Latest Discoveries and Theoretic Views, with Directions for the Use of the Globes, and for Studying the Constellations. By HENRY KIDDLE, A.M., Assistant Superintendent of Schools in New York. 12mo, pp. 284. New York: Ivison, Phinney, Blakeman & Co.. 1868.

ALTHOUGH the title of this volume would lead the intelligent reader to expect much, we think it will disappoint none, but rather surprise even the most sanguine. We have certainly found much more that will be new to most students than we had expected; and much more that will be interesting to the general reader. Nor is this opinion the result of a casual glance; for we have carefully examined the work in all its features and characteristics, partly because we admire the science of which it treats, and wish to encourage its study, and partly because the author has succeeded in investing even those facts and phenomena that are more or less familiar to all, with an air of novelty.

The mutifarious information in the letter-press is admirably arranged; there is no crudeness or vagueness; nor are any views, theories, or hypotheses presented in a sensational manner. In short, a philosophic thoughtfulness and calmness pervade the work from beginning to end; and in no elementary treatise published in this country have we found such excellent pictorial illustrations as those of Mr. Kiddell. This is particularly true of those in the chapters on Comets, Meteors, and Nebulæ; indeed, these fine engravings are creditable to all who have had a hand in them.

Another excellent feature of the book is, that while its exhibition of principles is abundantly lucid and satisfactory, it occupies comparatively little space with what is familiar to most intelligent persons, the author preferring to introduce as much as possible of what is new—of what at least has hitherto been confined to more elaborate treatises. To this we need not add any formal recommendation of the "New Manual of Astronomy;" it is one of those works whose intrinsic merits are a sufficient passport to the confidence of intelligent instructors.

1. *Lives of the Queens of England. From the Norman Conquest.* By AGNES STRICKLAND. Author of "Lives of the Queens of Scotland." Abridged by the author. Reviewed and edited by CAROLINE G. PARKER. 12mo, pp. 675. New York: Harper & Brothers.

2. *A Smaller History of England, from the Earliest Times to the year* 1862. Edited by WILLIAM SMITH, LL. D. Illustrated by Engravings on Wood. 16mo, pp. 357. New York: Harper & Brothers. 1868.

WE have, on former occasions, recommended the "Student's Histories," issued by the Harpers, as an excellent class of school books, and these now before us possess the same general characteristics which we indicated in previous notices of the series. Miss Strickland's "Queens

of England" is quite equal to the best in interest and attractiveness, in cosmopolitan liberality and freedom from prejudice; either religious or political, it is superior to all. The authoress is certainly the best authority on the queens; and she introduces characteristic anecdotes into her biographies which are not to be found in other works that are accessible to the general reader.

As the title implies, Professor Smith's abridgement is designed for a younger class of pupils than those for whom the "Student's Histories" are intended; but it omits no important events or incidents in the History of England. What renders it better adapted for children than the larger histories is the extreme simplicity of its style. The matter of it is admirably arranged: it has a full table of contents and a copious index.

MISCELLANEOUS.

Norwood. By HENRY WARD BEECHER. 12mo, pp. 549. New York: Charles Scribner & Co. 1868.

IT is not necessary that we should review this volume; its characteristics are pretty well known to those who care for such reading. The work is not without interest; it contains some descriptions of natural scenery, and portraitures of character, which show graphic power of a high order, and no slight knowledge of the human heart. But this is the most we can conscientiously say in favour of "Norwood."

We cannot help thinking that a clergyman might find something to do more worthy of his profession as a minister of the gospel than novel writing for the "Ledger." We fear Mr. Beecher does not praise God half so fervently as he does Bonner; but the latter pays in hard cash for that sort of thing, and it is but right he should get the worth of his money from all who undertake to do such work. However, we would not depreciate the half pious, half impious Ledger novel; although by no means a finished work—being a series of fragments put together somewhat crudely without much taste or skill—rather than a complete whole; it is much better, as well as more attractive, than most novels of the present day.

The Home of the Tulip, and Other Stories. By Miss ANNA B. COOKE. 24mo, pp. 200. New York: Prot. Epis. S.S. Union. 1867.

THIS tiny volume contains several pretty stories, which, though very simple, are as instructive as they are attractive to the younger class of readers. "The Home of the Tulip" and "The Home of the Wistaria" are charming fables, the object of which is to give the young reader lessons in botany and religion at the same time. "The Flower Eater" and "How God helps the Farmers" also combine useful instruction with harmless amusement.

The Life of Bishop Freeman of Arkansas. By the Rev. JOHN A. NORTON, D.D., Rector of Ascension Church, Frankfort, Ky. 24mo, pp. 208. New York: Prot. Epis. S. S. Union. 1867.

THERE is nothing either striking or exciting in this little volume; it is simply the record of a life which all who knew the subject admit to have been pure and good. We need hardly say that it is not the less instructive on this account. There is no more encouraging or useful lesson to youth than that which is inculcated by the example of one, who from an humble position raises himself by his talents and the influence of exemplary conduct to a position of eminence and honour. To this we need only add that, "The Life of Bishop Freeman" is written in a simple, attractive style.

APPENDIX.

Annual Reports of Insurance Companies, Good, Bad, and Indifferent, and other kindred Documents; New York, Boston, Philadelphia, &c., March 15, 1868.

DID our readers in general see one-tenth of the abuse which we receive from a certain class of insurers every quarter, for about three weeks after the issue of each number of our journal, we are sure that a large proportion would sympathise with us. But we would beg of them not to trouble themselves, for those things, far from disturbing our equanimity in the slightest degree, really amuse us. There are certain small animals that make a great outcry and show their teeth very threateningly when they are hurt—and none are more easily hurt—but they seldom frighten even old ladies. But we need not go beyond the species *homo* for an illustration; it is only necessary to enter the police court almost any day in order to comprehend the whole affair. There it would be seen that it is the worst malefactors who have most fault to find with the judge; it is true, indeed, that even in this atmosphere the abuse is done chiefly by the outcasts of the female sex. But, in either case, their bad language hurts none, makes none angry, save themselves. Innocent men and women may be brought into court and treated harshly; but they seldom abuse either their accusers, or their judges. There is a dignity about innocence and honesty which restrains them; and if they possess any intelligence they know there is another tribunal to which they can appeal against the wrong and injustice done them.

Let us assume that the judge is ignorant and malicious, or that he is bribed, and has, therefore, an interest in passing a false judgment upon us; it will be admitted that the way to prove our innocence under such cir-

cumstances is not to call him abusive names, send him anonymous, threatening and obscene letters, or put ourselves to the expense of distributing placards throughout the country to defame him. A much more rational course would be to show by some evidence, or even argument, that his judgment is false. If one is charged with stealing a sheep the main question to be decided is, did he steal the animal, or did he not? If, on some of the wool, entrails and other *exuvia* of the stolen quadruped be found in his possession, he turns about and accuses the person who has exposed and denounced him of being actuated by vindictive motives, and calls him hard names, the thing is natural enough, but does not answer the purpose. Nor will he serve his case much better by collecting a mob of his confederates to aid him in the work of abuse, since it is too well known that, however fiercely and unscrupulously that class of persons fight amongst themselves for the largest share of the booty, they are always ready to join hands against the common enemy—that is, against any one who attempts to expose the general operations of the fraternity.

These are a few of the reasons why we have been pleased, rather than otherwise, with the attentions showered upon us every quarter by a class of insurers well known to our readers. We have, perhaps, also derived some consolation from the fact that such, as do their duty, of the superintendents and commissioners of Insurance appointed by the Government, in different States, for the express purpose of putting the public on its guard against swindlers—are quite as much abused as we, by precisely the same parties. Superintendent Barnes of the State of New York, and Commissioner Sanford of Massachusetts, have had the honesty and courage to expose the *modus operandi* of certain "fast" companies; and accordingly no epithet, however low, is too abusive or insulting to apply to either.

Some of our best companies may, and doubtless do, find fault with them occasionally—especially with Mr. Barnes, whose numerous interrogatories have caused much additional expense—but they do not abuse him. They see, on reflection, that it is a tribute they have to pay for the protection of the public against the operations of those who are not so scrupulous as themselves; but it is precisely because it is well understood, on the other side, that the interrogatories alluded to are designed to restrain the dishonest (although the honest also have to incur considerable expense and trouble in answering them); that Mr. Barnes is as much detested by the quacks as we are ourselves. We believe there is only one charge made against us which has not also been made against the New York State Superintendent; we stand charged in at least a score of quack indictments, both in prose and doggrel, of having been born in Ireland, and had the presumption to come to this country, without the fear of God before our eyes, to make periodical attacks on innocent Insurance companies!

So far as we are aware no such count as this has been put in the in-

dictment against Mr. Barnes. Be this as it may, we plead guilty to a part of the charge—guilty not only of having been born in Ireland, but also of having spent most of our life, including our happiest days, in that island. We make this confession all the more readily because the respectable, enlightened class of Americans, with whom, almost exclusively, it has been our privilege to have relations, far from having ever made us feel that it was any reproach to have come from Erin, have always rather treated us still more kindly than they otherwise might have done. At all events, it follows that, because we are from Ireland, we must necessarily be ignorant of Insurance, and unable to distinguish a swindler from an honest man. But, if this be the difficulty, why make such a fuss, four times a year, about ourselves and our journal? There is no power in ignorance. An ignorant person may, indeed, cut one's throat or break his head; but as long as he uses no weapon but his pen, he can do little mischief; surely not sufficient to render it worth while for a dozen Insurance companies to soil their clean hands to throw dirt at him, and employ a mob of others to assist them at the same work!

It is well known that there are two or three Insurance journals in this city that live the precarious life they do by hiring themselves out by the month or six months, as bullies, to the highest bidder; and it is equally well known among intelligent underwriters that whatever hire those parties get they generally do their employers more harm than good for it. At all events, far be it from us to feel any resentment towards "editors" of that class; really we rather pity them, and think how much more honest and respectable they would have been had they stuck to their former trade of "drummer," cobbler, tailor, or whatever it was. If they get ten dollars a piece from a dozen quacks for abusing us, we are entirely satisfied, since it serves them and does us no harm. As for their "criticisms" on us, even the "quacks" must be amused at the foolishness of them. Thus, for example, one proves how stupid we are by showing that we choose such worn out subjects as Greek Comedy, Mediæval German Literature, &c., which, he tells us, "were written up and out years ago." This will remind our readers of a certain scene in a well known drama, in which Jack Cade addresses Lord Say as follows: "It will be proved to thy face that thou hast such men about thee that usually talk of a noun and a verb, and such abominable words as no Christian ear can endure to hear."* Jack further informs his lordship in the same passage: "I am the besom that must sweep the court clean of such filth as thou art."

Although it is a very grave offence on our part to meddle with subjects that others had "written up and out" before we were born, yet we might have been forgiven had we confined ourselves to those ancient topics, and

* Henry VI., Part II., Act iv., Scene 7.

said nothing about such modern topics as the operations of our quack insurers. But it would be unjust to rank all Insurance journals among the hired bullies; there is an Insurance journal in Boston, one in Philadelphia ("Ex. & Rev."), and another in Baltimore, which are respectably conducted. So far as we are aware these criticise fairly, but do not abuse all who have the temerity to find fault with the quacks. But precisely because they are above this baseness—because they have some regard for the proprieties of life, their patrons are far less numerous than those of the opposite class of journals. Sometimes the quacks patronize them also; but the patronage is withdrawn as soon as they fail to do their dirty work; or, if it is not entirely withdrawn, it is diminished to the lowest figure.

But have any of our readers remarked that when about a dozen New York companies break down, or "reduce their capital stock," which is nearly the same thing, so that the services of the geniuses belonging to them are no longer required, all of a sudden an Insurance journal springs up, fungus like. The brains, such as they are, gathered up from the *debris*, are thus turned into a very natural channel, for who can defend spurious assets more "conscientiously" than those who have dealt in such goods themselves as long as they found any to deal with them?

There is another class of Insurance companies which we do not rank among the quacks, although it must be admitted that they quack a good deal too. They are constantly boasting about their "assets," and as constantly running down the assets of their neighbours. They are distinguished by a foolish, vulgar pompousness, which, in spite of their great airs, renders them not a little ridiculous. Because they are styled "the executive," "executive officers," &c., by their Jenkinses, and are declared by the same authorities to possess unbounded knowledge, and transcendent "executive ability," they sometimes fancy themselves the Czar, the Shah, or the Grand Turk; and it is but natural that while in this mood they regard their betters as their vassals. Their stomach for praise is unbounded, and if it is not gratified by those whom they condescend to patronize, wo be to them. Sometimes we have ventured to remind them, in the politest manner we could, of the mule in ancient story that boasted largely of his noble ancestry, until his father, the donkey, lifted up his voice on the other side of the hedge and began to bray. But even those who satisfy their cravings to the fullest extent, dressing them up somewhat after the fashion of the clown adorned with a pig's tail and putty nose, have only done half their work until they make an onslaught on the "base" company over across the way, or in some other city, as the case may be.

It is no wonder, then, that even the Insurance Jenkins asks, "Have we a gentleman among us?" and informs us, on "official" authority, that so disgraceful has Insurance become, "it is a good business to retire from." Now, we have never made so general a charge as this; on the

contrary, we have always readily admitted that there are gentlemen among our underwriters. We will not charge Jenkins with mendacity, however; that sort of argument we leave to himself, and those of similar tastes. But may not the discrepancy be accounted for? Is it not sufficiently easy to understand that no gentleman, whether insurer or insured, would associate with a hired bully? The class of insurers, therefore, who employ him, may well ask, "Have we a gentleman among us?" and it may be truly replied, not one! Nay, if Jenkins had asked, "Have we a single man of real integrity amongst us; or one who would not rather swindle the widow and the orphan than give them their rights?" we fear we should have had to answer him in the negative, as in the other case.

We have been much pained to learn that the remarks which we took the liberty of making in our last on the Chamber of Life Insurance, were not satisfactory to "the honorable members" who were present. It seems that in the first place we should have said that more than seventeen companies were nominally represented; although it would have been a false statement. Should we exaggerate now, or tell the simple fact, that only *ten* companies, good, bad, and indifferent, were represented at the last meeting (Feb. 19)? The President of the New England Mutual still [persists [in staying away; it is said that the chair must be fumigated before he consents to occupy it. It required a very small chamber, indeed, to contain the present audience. Was it grief for this that caused Morgan and Eadie to keep their mouths so closely shut during the whole proceedings? Our reporter informs us that neither had ever looked so lugubrious before. What a contrast to their former fussiness and loquacity! Mr. Eadie did not even quote "our own poet—wholly our own"—to show that there ought to have been more present, and prove that the Chamber will one day be a very powerful institution. It is a pity that the chairman *pro tem.* did not lift up his voice as usual, even if he did do a little violence to grammar and other things; but he obstinately refused to afford us a hearty laugh.

The orator of the occasion was a Mr. Lewis of Washington; but if there is anything in his speech more than words it is above our comprehension. Mr. Jones, of the National Life, made some sensible, pointed remarks, as he always does when he speaks on Insurance, for he perfectly understands the subject. Mr. Elizur Wright made some good suggestions, also; but we cannot say as much of any of the rest. The speech of Mr. Noyes may be regarded as a very good specimen of the politeness of a certain class of underwriters. Speaking of the New York State Superintendent, he designates his questions as "foolish," &c. Referring to his own course as Commissioner of Connecticut, he says: "I was as easy with the companies as possible," &c. Further on the same gentleman informs his brethren that "he would not ask one-half or one-tenth the questions Mr. Barnes asks. If I could not get the true condition of a company from the questions *I would ask, I would go without.*'

This, perhaps, will be the better understood from the fact that Mr. Noyes is the President of a small company himself, especially in view of the adage that those who live in glass houses should be careful not to throw stones. Mr. Noyes has also great contempt for lawyers. On its being proposed to employ counsel in a certain case, he said "it was best to keep as clear of the lawyers as possible, for *they knew nothing of this business*, and we had to do their work if it was done." We quote this simply to show that Insurance is far too profound a science for any but underwriters of a certain class to understand; the insurer, like the poet, must be born with the necessary genius; no amount of study will do the work. Probably this is the reason why so many fail, and cheat the widow and the orphan!

We think our readers will bear us testimony that it is not our habit to boast of ourselves. There is one thing, however, of which we will boast, namely, that we have never been treated otherwise than courteously and well by gentlemen, whether underwriters or not. Nor will we deny that we prefer those who treat us well to those who treat us ill; in short, we prefer our friends to our foes. Yet we are not wholly actuated by selfish motives. We do not find fault with men who, we believe, are in general honest, no matter what feelings they may entertain towards ourselves. Thus, for example, there are several insurance companies in Massachusetts from which, so far as we are aware, we have never derived any benefit; but we have never found fault with one of them because we think they conduct their business in a legitimate manner. Indeed our relations with the people of Massachusetts, especially with those of Boston, for the last eight years have been such that we could not think ill of any of them except much stronger evidence were presented against them than we have ever seen. There is not an individual in the Bay State who has wronged us out of a dollar; whereas there are hundreds belonging to different professions who have done us good service.

Another reason why we entertain a good opinion of the Massachusetts Insurance companies is, that it has been our privilege to know one of them for years; and that we have never known better anywhere. Doubtless those who judge the motives of others by their own, will tell us that we speak better of the institution alluded to than we do of others, because it gives us more patronage; but such is not the fact. We have never derived one penny from it directly or indirectly more than our ordinary advertising rates; nor have we ever asked more. In short, it pays us less than several private business firms whose names we have never mentioned in our journal. The truth is, that we have always admired the ability and integrity with which the principal officers of the New England Mutual Life Insurance Company perform their multifarious duties. Their Annual Report is the first issued of all we see, and we take it up before others all the more willingly from the fact that it is always well written, and cosmopolitan in its views. We are sorry we cannot do more on the present occasion than to

quote the following results from its statement of business for the year ending November 30, 1867; but they speak for themselves, and are eloquent and convincing:

"3,389	Policies issued, amount insured.....	$12,376,212 00
896	Policies terminated, amount.....	2,685,618 00
2,943	Policies increase.....	$9,690,594 00

"The number of Policies on the books of the Company, including those on file unsettled and in hands of agents, is 16,526; amount insured, $51,867,184.05.

"There are also claims for insurance upon four hundred and fifty Policies, upon which the Company is liable for $1,000,000, under the requirements of the non-forfeiture law of April 10, 1861.

"One hundred and thirty policies were terminated by death of the insured during the year, amounting to $429,100."

These interesting evidences of well-merited success remind us that there are two features in Life Insurance, as conducted in Massachusetts, which should receive more attention than they have from that portion of the public which is seeking to obtain the most insurance for their money. In the first place, then, is the *non-forfeiture* law of April 10, 1861. It is not claimed, we understand, by any Massachusetts Life company that the companies of other States do not give, in most instances, the benefits of non-forfeiture policies; but it is claimed that no company out of Massachusetts is *compelled* to waive profits on forfeited policies as Massachusetts companies are by the law above mentioned. It is well understood that in mutual insurance there should be no such thing as profit. In a stock company there is profit. In a mutual life company the funds are held by trustees, who receive the premiums, put them at interest, pay claims and expenses, and return whatever surplus has arisen to the parties who compose the company. The overpayments are returned, but no profit (except on forfeited policies) is supposed to exist. Many companies, and it is unnecessary to particularize, have made large sums by forfeiture. When Mr. Elizur Wright was Insurance Commissioner of Massachusetts, his attention was drawn to the fact, and we understand that the law of April 10, 1861, is due to his efforts in behalf of those parties who might subsequently pay in more than the cost of insurance, and, perhaps, run the risk of losing the overpayment. This law provides that whenever a party has paid in more money than has been loaned by the company, four-fifths of his overpayment shall be considered as a single premium for a term insurance, according to the Combined Experience Table of Mortality. Thus perfect equality is maintained among all the members. If such a law could be enacted in every State of the Union where life insurance companies exist, no one's interest would be prejudiced.

Another feature—and it appears to us that in this respect Massachusetts

legislation is far beyond that of any other State—is that, by statute of February 16, 1866, it is provided that distributions of surplus shall be made in proportion to the contributions of members; that is to say, each member has his share of the gains by interest, mortality, and economy of management. The old plan of distributing surplus by giving a large return to the new members, at the expense of the old, is now done away with.

But the point to which we call attention is the fact that Massachusetts legislation provides how the business shall be conducted, and protects the interests of the insured throughout the State. Is it too much to expect that by and by our own State, which has already done so much, will not come forward and protect every policy-holder in his rights?

But we must not return to New York yet a while. Hartford is too important an Insurance place to be passed over; although we cannot give its citizens, as a whole, the same credit we do to those of Boston. It is generally admitted that there is no knowledge less liable to the alloy of error than that gained by observation and experience; and if we have not lost one dollar, as we have said, by the people of Boston, we have lost hundreds by those of Hartford, and been abused by them as if we had only just escaped from the State's prison, into the bargain. We will not say that we have been cheated or swindled by the latter, because these may not be the proper technical terms to apply in the cases alluded to—they may not accord with the views of those gentlemen (the lawyers) who, according to Mr. Noyes, are, like ourselves, so deplorably ignorant of Insurance. But were we to speak according to Paley, Webster, Blackstone, and certain other authorities, those are the very terms we should have to use. And it may be very illogical on our part, but we cannot help thinking that those who would deceive us would deceive others, and that consequently it is our duty to put others on their guard. Let us hasten, however, to say in justice to Hartford—that very beautiful, enterprising, and intelligent little city—that it is only against her insurers we have any complaint to make, and only against a few of these. We should, therefore, perhaps have said nothing on the subject, but we greatly dislike boasters who, in their greediness for gain, do all they can to run down their neighbors.

Probably we ought not to be surprised at the conduct of Mr. Batterson, who, instead of fulfilling his contract, gave us the lowest abuse in his quack organs because we would not fill our pages with puffs of his two companies. We had had this experience before we were favoured with the patronage of Dr. Guy R. Phelps, President of the Connecticut Mutual Life, who, before we had ever seen him or visited himself or his office, sent us his advertisement. We saw that, like his friend Batterson, he laid considerable stress on "the notice which I expect you will give;" and, like the same gentleman, he was "very much disappointed." Our

journal had already fallen in his estimation; it was evident we did not understand the science of Insurance, since we did not place the Connecticut Mutual far above all other institutions. In short, we did it "injustice" because we recognized some good qualities in other companies; but the greatest offence of all was to intimate that there are other good Life companies in New England, even in Hartford. We thought the Ætna and the Phœnix, as well as the New England, at least as good as the Connecticut Mutual, and we ventured to hint as much.

The Doctor was magnanimous, however; after his wrath cooled down somewhat he would give us another chance, and pay his advertising bill for half the year contracted for. Then, when preparing to go to press with our next number, we received quite a lengthy document, a sort of biography of the Connecticut Mutual—in which its operations are set forth as somewhat miraculous, far above those of any who pretend to rival it. In the same modest communication we received some very handsome compliments, notwithstanding our former blunder, such as "your excellent journal," "conducted with ability," &c. Finally, in a sort of postscript, our attention is called to "a circular which is now (then) being industriously circulated by the agents of the Mutual Life, showing to *what base practices that Company*," &c.

A copy of this circular was enclosed to us in order that we might know how to resent the whole thing in a proper spirit. We looked over the document, and found that it characterized the Connecticut Mutual rather logically as "wooden nutmegs." Of course we were very much annoyed at this, and spoke of the nutmegs in our next number as a libel on Dr. Phelps and his worthy colleagues. But it seems we should have done much more than this. Soon after we sent for the balance of what was due to us for the advertisement of the Connecticut Mutual, but, instead of paying, the Doctor writes: "We are very much disappointed in regard to your journal," &c., &c. It is no longer "an excellent periodical," but the reverse!

Now the question is whether we could think that a party who would pursue a course of this kind to a poor journalist, would be likely to deal very liberally with his policy-holders.* And if we have ever asked one penny from Dr. Phelps but our regular printed rates for ordinary advertisements, let him say so. The truth is, that private business firms, who have nothing to do with insurance, and whose names are never mentioned

* But it would seem that there must have been some doubt on that subject more than a year ago; for, in turning to the Connecticut Mutual advertisement in our journal, we find that it consists chiefly of a sort of "recommendation" from the cashiers of some fourth-rate banks, nearly all of Troy. The document is very much in the style of those who write to our quack doctors, "Send a few bottles more, and six packages of the pills—the effects are miraculous." It is very well to publish such "recommendations" when "rival companies that are jealous," &c. (see advertisement in any of the numbers of our journal for 1867), render a little "whitewashing" necessary; but to do so and refuse to pay for them, because puffs are not given into the bargain, seems to us very contemptible.

in our journal, pay more, for the reason that the Doctor would insist on getting a page and a half for what others pay for a page. Yet we have really no ill-will towards Dr. Phelps, or his company. We entirely agree with those who think that the manufacture of quack medicines has a vitiating influence on the conduct of most persons who have been engaged in it; and we are told that the "Tomato Pills" of Dr. Phelps were once as famous as the "Buchu" of Dr. Helmbold, or the "Pain Killer" of Dr. Radway, although we are further informed that the tomato pills killed more than they cured. How true this may be we will not undertake to say, but certain it is that since we have heard of the Tomato Pills, we have been disposed to regard the case of the Doctor as possessing extenuating circumstances. We are charitable enough to believe that in writing to us and trying to force us to declare his company superior to all others, he fancied he was addressing some of the village editors of Connecticut in favour of his pills, or perhaps lecturing Curry, or Jones junior, about the "peculiar features" of the Connecticut Life.

As we have no disposition to represent any one as worse than he really is, even by implication, we think it proper to say that the case of Batterson is different from that of Phelps. The former paid for the year what he promised to pay; whether he would have done so had we not taken the precaution of securing his written promise to that effect before inserting his advertisement, is another question. The manner in which Batterson operated on us was this: He induced us to let him occupy the cover of our journal for the price of an ordinary inside page, that is, *half* the price of the cover, by the positive and solemn assurance that at the close of the year he would pay the full price; his argument being that he was then limited in funds, &c. On no other condition would we have surrendered to him the page which we needed and always used ourselves for our table of contents, &c.; but when the time came to pay the money Batterson was afraid of Barnes, funds were limited, &c., &c. We remonstrated, and only got abuse for our pains. Our view was and is, that this was equivalent to obtaining goods under false pretences; nay, we confess that we have ever since regarded Batterson as having swindled us. Now our readers may judge for themselves which of the twain is entitled to the palm as an insurer!

It is well known that none are more ready to raise an outcry against those in the same trade with themselves, charging them with dishonesty and fraud, than those whose own conduct is not above suspicion. Accordingly, seeing that Batterson & Co. had worked themselves up into a very excitable state of virtuous indignation against the Provident Life Insurance and Investment Company of Chicago, because the latter happened to get involved in a lawsuit with some of its stockholders, we made it our business to institute some enquiries into the matter. We

have received information on the subject from several correspondents, all of whom speak in high terms of the Company, and their statements have been confirmed by the public journals of Chicago. We have never pretended to know more on the subject than we have learned in this way. But one thing is clear from the statements we have seen, namely, that those who have sued the company have failed to substantiate any serious charge against it. The "Banking and Insurance Chronicle" concludes its report of the decision of the court as follows:

"Finally, on behalf of the Provident Life Insurance Company, we deem it nothing more than justice to say that the Company *is perfectly solvent*, and has now—even after the cancellation of the preferred stock, and after the loss of $60,000 on its business (a sum which many *boastful companies* have not to lose, and never will have), during the past two years—over $100,000 in assets, that are readily convertible into cash for that sum in the market, and we feel that we are doing the Company no more than justice to say that *they will meet all their obligations to the public with promptness and fairness.*"

We believe this to be true; we have no reason to doubt it: but whether we are right or wrong in our opinion, we certainly would rather take the word of either the President or Secretary of the Provident Life and Investment, for $100 than that of Batterson for $5.

In any case Hartford has underwriters enough to show that she deserves her prestige as an underwriting city. Since we did not believe a year or six months ago that the Connecticut Mutual was superior to all other companies, it is not likely that we could entertain that opinion now. Most assuredly we regard the Ætna Life, Phœnix Life, and Charter Oak Life as vastly more respectable, as well as more reliable. In the first place, the Ætna did a larger amount of business in 1867 than the Connecticut. According to official returns now before us, the former issued 15,251 new policies, while the latter issued only 14,161. In short, one of the Hartford companies that we should have depreciated to please its neighbours, did more business in 1867 than any other company in the United States, and it continues to make progress in the same, if not in a still greater ratio. During last year the Ætna received premiums to the amount of $4,401,183.86, nearly five millions; so that its assets amount now to $8,000,000, after having paid claims during the past year to the amount of $513,881, its total income for the same year being over five millions ($5,129,447). When the large and various dividends of the Ætna are added to these figures, it will be admitted that the Secretary may well close his annual statement as follows:

"The opposition to which we alluded in our last Report has continued unabated during the year. That the business of the Company should have been so successful (exceeding largely that of any previous year), is surprising, when we contemplate the unusual, and *often malicious efforts* made against us, which we attribute to the unsurpassed progress of the Ætna, evidenced in the following statement of its growth:

	1861.	1862.	1863.	1864.
Policies issued.	589	760	1,722	4,337
Income	$73,533 67	$92,204 60	$201,454 67	$694,827 53
Assets.....	281,263 65	310,492 04	431,236 02	881,578 72

	1865.	1866	1867.
Policies issued.....	8,809	14,912	15,251
Income	$1,693,089 57	$3,556,236 70	$5,129,447 34
Assets..... ..	2,036,823 05	4,401,833 86	7,538,612 35

So much for one of the companies which we failed to regard as "inferior." Another is the Phœnix Mutual Life, than which we really know no more solid or reliable institution. We speak from the knowledge of experience, and with unfeigned sincerity, when we say that we would not have the least hesitancy in taking the word of its principal officers for thousands. They are men who talk little and boast less; but with whom it is always pleasant to deal. We take pleasure in extracting from their statement for the year ending January 1, 1868, the following figures, which, it will be seen, embrace sound and convincing arguments in themselves:

Net Assets, January 1, 1867..... ...	$1,198,256 96	
Premiums received during year.....	1,058,245 15	
Interest received during year.....	120,799 13	
		$2,377,301 24
Add Premiums in hands of Agents,	199,648 00	
Add Accrued Interest and Cash Balances	28,576 02	
		228,219 02
		$2,605,520 26

The number of policies issued during the same year by the Phœnix was 5,811, insuring $15,230,910. Add to these figures the amount of losses paid during the year, namely, $530,500, and the 50 per cent. dividend, paid regularly year after year, and we think it will be admitted that far from being "inferior," the Phœnix is eminently worthy of the classic name it bears.

As we have departed from our usual custom on the present occasion in being somewhat egotistic, we think it is but justice to the polite and intelligent President of the Charter Oak Life to say, that his conduct towards us has been the reverse of that of those fellow-citizens and brethren of his of whom we have complained above. His advertisement was ordered, it seems, only for a certain time; by a mistake, it was inserted for twice that period; but, far from using any insulting language,

Mr. Walkley cheerfully and politely gave his check for the additional amount. And our experience of the gentlemen of the Ætna Fire, Putnam Fire, &c., has been equally agreeable. Neither Mr. Hendee nor Mr. Buck has ever treated us otherwise than courteously and kindly. But there are Hartford underwriters with whom we have had no dealings whatever, for whom we have the highest respect. This is true, for example, of Mr. John C. Rice, of the Continental. We are not aware that this gentleman has ever patronized us to the extent of one dollar; yet we would no more disoblige him than we would our esteemed friend, Mr. Enders, or Mr. Fessenden, simply because he is too much the gentleman to disoblige or offend us without our having deserved it from him. It will be seen, then, that, if we have been rather shabbily treated in Hartford by underwriters—so much so, we confess, as to have reminded us more than once of the celebrated Jeremiah Diddler—it is only by a very *small* minority.

In returning to New York, after our hurried excursion through Massachusetts and Connecticut, we are reminded, not of those Life companies that make most noise, but of those who do most good in proportion to the promises they make; such as the Knickerbocker, the Equitable, the Manhattan. In our opinion there is no company in the United States more intelligently or ably managed than the Knickerbocker; at the same time, there is no company that assumes less airs, or is more modest. Mr. Lyman is always cheerful and courteous; never loses his temper; never fancies that because Jenkins styles him "the executive," he is sovereign lord. That sort of thing he leaves to those who abuse each other in the morning about their assets, and sing psalms in the evening at union prayer-meetings. Yet no one makes more steady progress at home and abroad. Only three or four years ago the Knickerbocker was one of our struggling companies, although in its gloomiest days its struggles were manly and honourable. Now it is one of our strongest. Its assets are nearly, if not quite, three millions and a half, and its income for 1867 was over two millions. We well remember how the United States Life, the North American Life, and one or two other similar concerns, used to sneer at it; but let us compare its position to-day with that of some of its detractors—especially those who keep bullies in their pay to growl for them. Thus, the number of policies issued by the Knickerbocker in 1867 was 10,284, while the North America can pretend to have issued only 5,259, and the United States only 1,814. This would seem to show that it does not pay, after all, to be Vice-President or Secretary of the Insurance Chamber; but that it does pay to stay at home, mind one's business, and not make a laughing-stock of one's self.

We do not know but we may offend both parties by remarking that the course of the Manhattan Life seems to us very like that of the

Knickerbocker. The officers of the former, as well as those of the latter, are much more given to thinking than to talking—much more disposed to mind their own business than that of their neighbours. The Manhattan people are in no hurry to make large fortunes, yet they are steadily increasing their pile. Their assets amount now to nearly four millions and a half; their receipts, during 1867, amounted to nearly two millions ($1,979,360.18). No stranger who judges of men's wealth by their demeanour could suppose that the officers of the Manhattan, from the President to the Actuary, had one-tenth the amount indicated at their command; but when the widow or the orphan presents her claim, then it is readily seen that there are abundant funds.

As for the Equitable Life, it is piling up the cash at a prodigious rate. It appears that its income from premiums, during 1867, amounted to $4,000,000; the amount insured the same year assuming the colossal dimensions of $45,000,000. We believe that only two other companies in the United States have done a larger business during the year. We need hardly add that one of these is the Ætna of Hartford.

The Mutual Benefit Life of New Jersey takes rank among the most intelligently and creditably managed institutions in the United States. It engages in no quarrels; makes no attempt to disparage the efforts of its rivals; but makes as near an approach as any company we know on either side of the Atlantic to the fulfilment of the adage, "Doing good by stealth, and blushing to find it fame." If the Connecticut Mutual and New York Mutual had imitated its example in this respect we should not have been annoyed ourselves, as shown above by the nutmeg and "notice" question. It really affords us pleasure to record the success of a company whose conduct is so exemplary as that of the Mutual Benefit. It appears from the official statistics now before us that it issued 6,024 policies in 1867, insuring $23,515,110, its premiums for the same period amounting to $4,191,143. Thus it did about as much business for the year as the New York Life, another highly respectable company, as our readers are aware. The assets of the Mutual Benefit now amount to over fourteen millions ($14,290,088), honest counting—no wooden nutmegs included, no pills!

The National Life may be regarded as a colony of the Manhattan; but it declared its independence some three years ago, which was fully recognized by the parent institution, and has never been called into question since. It does not make a large display of figures, but modest though its assets look, they are larger in proportion to the claims upon them than those of companies which boast of being the wealthiest in the world. Accordingly, no claims are more satisfactorily settled. Thus, it paid the handsome sum of $24,500 in 1867, together with $9,569 in dividends to its policy-holders. We doubt very much whether the Mutual Life paid so much in proportion to the claims upon it, although we have a docu-

ment before us (one somewhat like that sent us by Dr. Phelps some time ago) which represents that the latter company pays dividends to the policy-holders according as they are distinguished or otherwise. Thus, for instance, it is alleged that the heirs of a prominent New York merchant receive fifteen times the additions that are received by the heirs of a poor woman; that a bishop's heirs receive six times the additions given to the heirs of plain Mr. Smith, &c.; the object in each case being to have the "distinguished" policy-holders aid the company in blowing its horn. How correct or incorrect this may be we cannot undertake to say; but in either case we should certainly feel as sure of our money if we had a rightful claim of ten thousand, or twice the amount, on the National Life, as we should if we had a claim for the same amount on the Mutual Life; nay, indeed, a little surer. The officers of the National are trained underwriters; they are a credit, in every respect, to the Manhattan, whose good and honourable example they emulate; and among their Board of Directors are some of our most intelligent and most successful business men. In giving a specimen we need not be more personal than to say that one of the ablest and shrewdest of the editors of our morning papers is among the official advisers of the National officers.

New companies have multiplied within the last two years; as we mentioned on a former occasion, three-fourths of these new-fledged institutions are far too suggestive of the petroleum companies which multiplied in a similar ratio some three or four years since, and whose fraudulent operations we were the first to expose. Many of them are got up by the friends of persons who have failed in several other kinds of business, for the purpose of getting rid of them, the same as other benevolent gentlemen set up widow ladies of a certain age, who are without means, as boarding-house keepers. As in the latter case all the patrons feel called upon to do is to give some aid in procuring furniture, become security for a quarter's rent, and for a month's bill with the butcher, and perhaps the grocer; so in the former they think they have done enough when they have subscribed what Mr. Barnes has to get, furnish an office, and take a certain amount of the stock. It is hardly to be wondered at then that the "assets" are sometimes found deficient when the death of some honest dupe takes place. How much they are to be trusted we can judge thus far only by the fact that some of them have swindled ourselves by false representations out of numbers of the National Review.

But there is one new company which recalls Hercules in his cradle; we need hardly mention that we mean the Continental Life. This company did not commence business until 1866; and it issued more policies last year than companies that have been in existence seventeen years. Thus, for example, the United States, which was organized in 1850, issued only 1,814 policies in 1867, whereas the Continental issued 4,188, considerably more than twice as much. It issued more than

the Guardian, the Washington, the Security, the Widows and Orphans' Benefit,* &c., all of which are considered old companies, at least old enough to be vastly better and more reliable than they are. The amount insured by the Continental during the year was nearly twelve millions, which brought an income of nearly a million ($807,249). Add to this $25,000 paid for claims, and a dividend of forty per cent., and it will be admitted that the Continental Life has accomplished wonderful results. There is nothing strange about them, however; they are the results of well-directed intelligence and energy. The President and Secretary combine abilities and qualifications which, when fully exercised, never fail to secure success; accordingly, we did not hesitate to predict at the outset that the new company would rapidly attain a high and honourable rank among our Insurance institutions.

It is worthy of remark that a company bearing the somewhat ambitious title of the *World Mutual*, organized the same year as the Continental, has only issued about *one-fifth* as many policies in 1867 as the latter. Henceforth may we not be excused if we sometimes think that it takes nearly five Worlds to make a Continent? So much for the difference between management and *mis*-management!

Another new company which has assumed a very good name, is the *Standard* Life. This is to be a model for all others. Those who give it their money may regard themselves as having deposited so much in a bank—*not* a faro bank; if they pay more than $40 as an annual premium, they can borrow one-third of it when they are in need of that amount, to buy a pair of boots, pantaloons, or a bonnet, as the case may be! The company possesses several other "features" that are similarly tempting, including a President who is equally skilled in Life Insurance and several other kinds of business, in none of which, however, has he succeeded thus far. One would think that an institution offering so many inducements would have a large demand for its policies, but it does not claim to have issued more than *one hundred and fifteen* (115) in 1867. How is this? Some say that it has bottom enough, but no head that can think.

But there will be good companies that are yet unchristened. We hear at least of one. If it be true that Jay Cooke & Co. are about to organize a Life Insurance Company, and we see no reason to doubt it, then the public may calculate on a new institution, which, like the Continental, will take high rank even in the first year of its existence.

Most of our Fire and Marine companies have suffered severely since our last report; but we are glad to add that there are none of those whose honourable conduct we have felt it our duty to note from time to time as worthy of imitation, which will not be fully able to meet all their liabilities. The Mercantile Mutual (Marine) has sustained heavy

* We think that if "Benefit" were left out in this case the title would be much more appropriate.

losses; but true to its prestige it has made no effort to evade them. It has not sought, like some of its neighbours, to make mere bubbles available as a means of cheating its policy-holders, but confronted its difficulties in a manly, straightforward manner. All honest men will be glad to learn that a company of this character is in no danger; for the Mercantile Mutual has still an ample fund, not only to meet all just claims, but to afford the same sure protection in the future for which it has been distinguished in the past.

The Security Insurance Company has fully realized the predictions which we ventured to make, while the Sun, Metropolitan, Neptune, &c., &c., were struggling—some of them most ingloriously—for a sickly existence. We had always regarded the Security as worthy of its name; but our confidence in it was much strengthened by the accession of its present chief officers. The President and Secretary are not only experienced underwriters; it is well known that they are gentlemen of superior intelligence. This is particularly true of Mr. Ballard, who possesses more literary ability and more knowledge of insurance than the whole mob of scribblers who do both the puffing and fighting of the quack insurance organs. We take sincere pleasure, therefore, in recording the fact that the Security is $150,000 stronger at the present moment than it ever was before. Its net cash premiums for 1867 exceeded those of the former year to the extent of more than a quarter of a million ($353,-842). It paid more than a million of losses ($1,073,146), its income for the same year amounting to $1,759,046.

Another Fire Company that minds its own business is the Washington, and accordingly it has issued its thirty-third dividend, and at the same time increased its surplus fund, so that with the capital it is now pretty nearly a million ($736,200.00.) On the 7th of February last it declared three dividends; one of six per cent., payable in cash, an interest dividend of the same rate, and a scrip dividend of 33⅓ per cent. These facts are sufficiently significant; and they are the results of intelligent, upright attention to business. This will be the better understood if it be borne in mind that there are some two or three officers of Fire and Marine companies who fancy they make great men of themselves by getting elected chairman by different other bodies. Foolishly priding themselves on this fancied importance they become so arrogant and overbearing that they have no patience with any one who will not pander to their vanity.

This was the chief cause of the downfall of the *Moon* Mutual, as our readers may remember; some of its officers took much more pains with other people's affairs than with their own; they would, forsooth, be politicians, though only on a very small scale, as well as underwriters; and hence, there was a sad bursting of bubbles at last. There is a small company in Broadway which is pursuing the same course, although one fire of respectable dimensions would blot it out of existence. Its

President is constantly running to "preside" at some "board" or other, like a cackling hen that fancies she has an egg to lay. The directors would do well to give this gentleman a lesson; they might hint to him, for example, that pigmies look very ridiculous when they try to ape giants. In compliment to esteemed friends of ours, for whom the individual alluded to does some work, which we suppose is useful in its way, we will mention no names; although none will deny that snobbish underwriters, and small politicians, are as legitimate subjects of criticism as any other species of that genus who make the angels weep with the silly airs they put on.

It is certainly not for any lack of respect, or confidence, that we omit to speak of the Hope Fire until the close; but its prepossessing name puts us into an agreeable frame of mind, and prompts us to *Hope* that there may be an improvement in Insurance morality before we make our next report. Be this as it may, were all fire underwriters to perform their duties, and fulfil their engagements so faithfully as those of this modest institution, none would have reason to complain. It makes no display of figures; its capital is but $150,000—its surplus fund was $53,392, at the first of the present month (March); yet we have as much confidence in its policy as in that of the old Ætna of Hartford, which is one of the strongest and most reliable companies in the world.

INDEX

TO THE

SIXTEENTH VOLUME

OF THE

National Quarterly Review.

Agrippa of Nettesheim on medium between spirit and matter, 353.

Alexander III., Pope, and Barbarossa, 327—institutes wedding of the Adriatic at Venice, 328.

American Astronomers, progress made by, article on, 332—desire for investigation natural to man, *ib.*—general result of, 333—true method of, *ib.*—first positive astronomical hypothesis, *ib.*—Herschel and Laplace on, *ib.*—nebular theory, *ib.*—shape of earth proves truth of, 334—comet of 1858 a gaseous compound, *ib.*—Biela's comet, *ib.*—proof by spectrum analysis, 335—extent of interstellar spaces, *ib.*—motion of the fixed stars, *ib.*—how caused, *ib.*—of solar system, 336—form and density of members of, *ib.*—theories of Laplace, *ib.*—test of nebular hypothesis, 337—Huggins on, *ib.*—nebula in Orion, *ib. et seq.*—in Andromeda, 338—motive forces in nebulous formations, *ib.*—force of gravity, 339—theory of formation presented, *ib.*—effect of heat on light, *ib.*—excessive heat would resolve matter into original gases, 340—variations of nebulous density, *ib.*—conditions of fluid equilibrium, *ib.*—effect of magnetic influence on motion, 341—of chemical affinity, *ib.*—origin of nebulous rotary motion, *ib.*—Ennis' four sources of motion, *ib. et seq.*—origin of stellar systems, 342—of solar, *ib.*—solar nebula specially considered, 343—form of, *ib.*—temperature of all matter variable, *ib.*—effect of contraction on motion, *ib.*—change of velocity, 344—effect of friction, *ib.*—cause of centrifugal force, *ib.*—effect of nebular separation, *ib.*—relation of planes, *ib.*—effect of density on rotary motion, 345—origin of asteroids, *ib.*—linear velocity of Mercury, *ib.*—solar density, 346—planetary diameters, *ib.*—various astronomical explanations, *ib.*—relation between members of solar system, *ib.*—process for determining the sphere of attraction, *ib.*—Kirkwood's confirmation of nebulous theory, *ib. et seq.*—origin of meteoric stones, 347—of comets, *ib.*—meteoric motion, *ib.*—cause of high solar temperature, 348—heat derived from fixed stars, *ib.*—Helmholt, Mayer, and Ennis on solar heat, *ib.*—eventual cessation of, 349—consequent destruction of our system, *ib.*—material nature subject to periodic changes, *ib.*—nebulous theory generally accepted, *ib.*

Amphilus on Epicurus, 24.

Anafesto, Paulilio, elected first Doge of Venice, 311.

Apollodorus on Epicurus, 211.

Aristophanes compared with Menander, 8—plays of, 13.

Astronomy, Manual of, noticed, 393.

Astronomy, Nebulous, article on, 95—stars generally arranged in groups, 96—nebulous stars, *ib.*—first discovery of, *ib.*—opinion of astronomers on, *ib.*—Helvetius' nebulous catalogue of, 1660, *ib.*—Huggins' discovery of the nebula in Orion, *ib.*—new nebulæ, 97—nebulæ of the southern hemisphere, *ib.*—investigation of, by Herschel, *ib.*—published catalogues of, *ib.*—stellar and nebulous classes of, *ib. et seq.*—composition of nebulæ, 98—planetary nebulæ, 99—resolvable and irresolvable nebulæ, *ib.*—paper on, before the Royal Society in 1833, *ib.*—observations in the northern hemisphere, 100—publication of, *ib.*—elliptic nebulæ, *ib.*—in Andromeda, *ib. et seq.*—Herschel's nebulæ investigated by Rosse in 1844, 101—nebula in Lyræ, 102—variable nebulæ, 103—the star Eta Argus, 104—opening in the galaxy, *ib.*—explanation of temporary stars, 105—nebula in Orion, *ib.*—Slapounoff and Struve on, 106—Professor Bond on, *ib.*—spectrum analysis applied to nebulæ, 107—gaseous nature proven by, *ib. et seq.*—light and colour as investigating media, 108.

Barbarossa, Frederick, and the Venetian Republic, 327.

Barbarossa, Frederick, as an heraldic authority, 166.

Belles-Lettres, 178 *et seq.*.

Bench and Bar, by L. Bigelow, reviewed and criticised, 196 *et seq.*

Bichat on microscopic anatomy, 392.

Biela's comet of gaseous nature. 334.

Birkenhead, Sir John, royalist editor, 242.

Boerhaave, Dr., on convulsive subjects, 85.

Bond, Professor George P., on the nebula in Orion, 106.

Bossuet on Fra Paolo, or Sarpi, Secretary to Council of Ten, 330.

Boutillaud, Dr., on Mesmer's process, 25 *et seq.*

Brahe, Tycho, on sleep, 367.

Brown, J. Ross, Land of Thor reviewed and criticised, 191 *et seq.*

Burdach on physical condition during sleep, 367.

Burton, Robert, on news pamphlets, 237.

Butler's Hudibras, curious notice concerning, 343.

Capucefalo, Count, executed by Council of Ten, 330.

Carmagnola, Francesco, assassination of, by Council, 322 *et seq.*

Carrara, Novello de, prince of Padua, treatment of, by Council, 321.

Cavaxilles, growth of grass measured by, 299.

Charles II. said to cure scrofula, 244—authorizes lottery of plate, 246.

Chrysippus on character of Epicurus, 219.

Churchman's Calendar reviewed, 389–90.

Cicero on Epicurus, 220.
Clement V., Pope, protests against seizure of Ferrara by Venice, 328 *et seq.*
Clovis of France and the *fleur de lis*, 168.
Copernicus, educated and assisted by monks, 131.
Coquelin, M., on value of paper money, 65.
Cornwallis, Lord, position of, at Yorktown, 76 *et seq.*
Curran, John Philpot, Life of, by Thomas Davis, noticed, 198.
Dareste, M., on colour of China Sea, 297.
Daru, M., on ancient Venetian families, 309—on government of Council of Ten, 318 *et seq.*—on action of State Inquisitors, 326.
D'Aubigne's early life of Luther, 111.
Debreyne's case of a convulsive subject. 35.
Deluge on conditions requisite to magnetic trance, 27–36.
Descartes, a disciple of Epicurus, 229.
Deslon's experiments in animal magnetism, 28 *et seq.*
Deville, on action of excessive heat on gaseous elements, 340.
D'Holbach's, Baron, System of Nature, 229.
Diogenes, Laertius, on Epicurus. 210–12.
Donaldo, on Doges of Venice, 312 *et seq.*
Dunglison, Dr., on somnambulic sight, 43.
Dupas, Dr., on magnetic effects, 34.
Eck, Dr., disputation with Luther, 121.
Educational matters, 198 *et seq.*
Ehrenberg on microscopic life, 293—on classes of Polypes, 294—on Diatomacea, 298.
English newspapers and printing in seventeenth century, article on, 234—typographical works of, 235—printing press of, *ib.*—process, *ib*—proof readers in 1500, *ib.*—various printing inks, 236—press under James I., *ib*—printing in Ireland, *ib.*—first English newspaper, 237—news pamphlets, *ib.*—Burton on, *ib.*—other news publications, *ib.*—early editions of Shakespeare, *ib*—press licenses, *ib*—unlawful printers, *ib.*—action of Roundhead parliament, *ib. et seq.*—first English paper-mill, 238—various publications from 1626–42, *ib.*—parliamentary publications, *ib*—newspapers of Cromwell's time, 239—partisan influence of, *ib.*—publication of Charles II.'s letters, 240—first Scottish "newesbook," *ib.*—lottery advertisement, *ib.*—agency office, 241—author of Mercur. Brit., *ib*—of Mercur. Aulicus, 242—Roger L'Estrange, *ib.*—papers from 1661–68, *ib.*—after the Restoration, 243—curious notice of Hudibras, *ib.*—debated publication of parliamentary proceedings, *ib.*—various brands of paper in use, 244—cure of scrofula by Charles II., *ib.*—first English Gazette, 245—London printers in 1666, *ib.*—conflagration of books at St. Paul's, *ib.*—number published from 1666–69, *ib*—lotteries of, *ib., et seq.*—plate lottery, 246—type from Holland. *ib.*—papers of Popish Plot era, *ib.*—L'Estrange's censorship, *ib.*—curious advertisement. 247—players and mountebanks licensed, *ib.*—insertion of advertisements, *ib. et seq.*—lottery of Prince Rupert's jewels, 248—press licensers, under James II., *ib.*—progress of printing in 1686, 249—press censorship under James II., *ib.*—his order to Stationers' Company, *ib.*—Stationers' May Feast, 250—increased demand for newspapers about 1690, 251—first English manufacture of white paper, *ib.*—favourable effect of, *ib.*—passage of stamp act, *ib.*—revenue ensuing to king, *ib.*—reasons for repealing, *ib. et seq.*—re-enforcement of, 252—effect on Spectator, *ib.*—liberty of press established, *ib.*—various news letters, *ib.*—duty on paper in 1696, 253—value of English production, *ib.*—effect of duty on, *ib.*—protest against, *ib.*—sale of stamped paper, 254—complaint of Stationers' Company, *ib.*—further protests, *ib. et seq.*—early printing in Scotland and Ireland, 255—Henry VIII.'s "Act for Printers," *ib.*—act of Queen Anne, 256—compositor's work in 17th century, *ib.*—symbol of printing in, *ib.*
Euler, Prof., on gravitation, 339—on sources of nebulous motion, 341, *et seq.*—on solar heat, 348.
Epicurus and his philosophy, article on, 209—philosophers always persecuted, *ib*—truth vindicated, 210—character of Epicurus, *ib.*—atheism of, *ib*—investigation necessary to progress, *ib.*—birth of Epicurus, *ib*—his father, 211—visit to Athens, *ib*—philosophical education, *ib.*—aversion to ignorance, *ib*—early atheistic ideas, *ib*—studies under Xenocrates, 212—school at Mytilene, *ib.*—at Lampsacus, *ib.*—at Athens, *ib*—enemies, *ib.*—education required in pupils and listeners, 213—carelessness of fame, *ib*—devotion of pupils, 214—Stoics' reason for, *ib.*—authentic works extant, *ib.*—Cicero and Plutarch on. *ib.*—three philosophical divisions. *ib.*—exercise of reason advocated, 215—atheism not his fundamental principle, *ib*—analysis of system. *ib*—letters to Herodotus and Pythocles, *ib.*—preparation of students, *ib*—theory of sensations, 216—plausibility of, *ib.*—vacuum theory, *ib*—demonstrated by Newton and Kepler, *ib.*—atomic theory, *ib*—falsity of, *ib.*—moderation of Epicurus, *ib.*—his opinion of the gods, *ib*, *et seq.*—accusation not proof, 218—true meaning of pleasure, *ib*—evil of excesses, *ib.*—advantage of prudence, 219—moderate life, *ib.*—testimony of contemporaries, *ib.*—criticism of Cicero, 220. *et seq.*—justice of, 221—views of Seneca, 222—of Plutarch, *ib. et seq.*—Epicurus interpreted by Lucretius, 223—De Rerum Natura refuted by Polignac, *ib. et seq*—analysis of, 224—Lucretius' feeling for Epicurus, 225—praise of, *ib.*—just estimate of, 226—eulogy on Athens, 227—Lucretius as an exponent of Epicurus, *ib.*—number of his disciples, 228—illustrious Epicureans, *ib.*—Roman followers, *ib.*—Horace and Cicero, *ib.*—disrepute of his doctrines in their age, *ib.*—opposed by Christian fathers, *ib*—modern atheists his followers, 228—Descartes, *ib*—D'Holbach, exaggeration of, *ib.*—extracts from, *ib. et seq.*—Epicurus a follower of Leucippus and Democritus, 231—not a plagiarist, *ib*—compared with Homer, Hesiod, and Virgil, *ib.*—spirit of works, *ib. et seq.*—basis of system, 232—instability of, demonstrated, *ib et seq.*—applied to animal life, 233—atomic theory refuted by Cicero and Christian fathers, *ib.*—moral effect of works, *ib.*—eventual benefit of, to mankind, *ib.*
Erasmus on interior of English houses, 268.
Erasmus, profound scholarship of, 129.
Eschenback, Wolfram von, article on, 136 *et seq.*
Farr on comparative morality in Europe, 274.
Fischart, Johann, popularity of works, 136.
Fontana, of Naples, inventor of microscopic double convex lenses, 291.
Foscari, the two, persecution of, by the Council of Ten, 323. *et seq.*
Franklin, Benjamin, on animal magnetism, 29.
Galen's hygienic precepts, 279.
Galileo sends microscope to King of Poland, 291.
Gibbon on ancient Roman baths, 284.
Greek Comedy, Menander, article on, 1—value of ancient literature, *ib.*—paucity of its re-

mains, *ib.*—comedies of Menander, 4—existing fragments of, *ib.*—superiority of, *ib.*—destruction of ancient works, *ib.*—birth of Menander, *ib.*—position and services of his father, *ib.*—his mother, 5—early education, *ib.*—friendship with Epicurus, *ib.*—influence of, *ib.*—character by Suidas and Plutarch, 6—testimony of Pliny the Elder, *ib.*—invitation to Egypt by Ptolemy Sagus, *ib.*—various portraits and statues, *ib.*—statue described by Guizot, 7—Athenian law concerning portraits, *ib.*—scarcity of authentic ancient portraits, 8—vanity of men of genius, *ib.*—of Menander, *ib.*—influence of Aristophanes' plays, *ib.*—of Menander's, 9—Plutarch as a biographer, *ib.*—his estimate of Menander, *ib. et seq.*—of Aristophanes, 10—justice of, *ib.*—literary merit of Terence, 11—derived from Menander, *ib.*—beauty of the original plays, *ib.*—other Roman imitators of, *ib.*—criticisms of Horace, Persius, and Ovid, on, *ib. et seq.*—Julius Cæsar on Terence, 12—Quintilian on Menander, *ib.*—on Aristophanes, 13—digest of Aristophanes' plays, *ib.*—Menander the inventor of the regular drama, 14—analysis of "The Apparition," *ib. et seq.*—character of fragments, 15—specimen of, *ib. et seq.*—morality of, 16—passage from "The Theophoroumeni," *ib. et seq.*—genuineness of, 17—from "The Suppositious," 18—various aphorisms by Menander, 19—grandeur of, *ib.*—the Andria of Terence, *ib.*—passages from, 20, 21—extract from Hecyra, 21—traditions of the destruction of Menander's works, 22—of his suicide, *ib.*—probable death, 23—concluding criticisms, *ib.*

Grattan, Henry, life of, by D. O. Madden, noticed, 198.

Hallam, Henry, on Council of Ten, 317.

Hally, Edward, on southern nebulæ, 97.

Hamilton, W. C., on Venetian patricians, 317 *et seq.*—on persecution by government, *ib.*

Hecker, on epidemics of middle ages, 267 *et seq.*

Helmholtz, Prof. on solar heat, 348.

Heiretius' catalogue of nebulæ, 96.

Henle, Dr. on contagious diseases, 305.

Henry VIII.'s opposition to Luther as a reformer, 128—cause of the English Reformation, 129.

Heraldry; its origin and influence, article on, 160—universal use of symbols, *ib.*—man anxious to possess marks of distinction, *ib.*—consequent introduction of heraldry, *ib.*—said to be of divine origin, 161—traced to Adam and Eve by Terne, *ib.*—use of by ancient Hebrews, *ib.*—gradual growth of, *ib.*—probable origin of, 162—use of by ancient Germans, Saxons, and Romans, *ib.*—application during the Crusades, 163—devices of knights, *ib.*—absence of heraldic insignia in the Bayeaux tapestry, 164—coat-armour previous to Henry VIII.'s time, *ib.*—paucity of authenticated specimens of, *ib.*—shields of de Magnairlie and Plantagenet, *ib.*—seals bearing armorial devices, *ib.*—rolls of arms, *ib.*—establishment of College of Arms, *ib.*—heraldry in the reign of Richard III., *ib.*—trial by combat, *ib. et seq.*—tournaments, 165—tenure by knights' service, *ib.*—conditions of bearing arms, *ib.*—nomenclature of heraldry, 166—legal value of armorial rolls, *ib.*—variable shape of escutcheon, *ib.*—points of, *ib. et seq.*—ground of, 167—use of fur in heraldry, *ib.*—explanation of terms, *ib.*—symbols, natural and fictitious, *ib.*—floral emblems, 168—myth of the *fleur de lis*, *ib.*—introduction of the crest, *ib.*—augmentation of bearings, *ib.*—classification of arms, 169—armorial marks of disgrace, *ib.*—inversion of the shield, *ib.*—relation between arms and name, 170—value of family records, *ib.*—interpretation of heraldic symbols, *ib.*—heraldry an incentive to valour, 171—the twelve crosses and eagles of de Montmorency, *ib.*—heraldic elements a favourite poetic theme, *ib.*—Spencer's Red Cross Knight, 172—various poetic allusions, *ib.*—Dante's usurers in the Inferno, *ib.*—national symbols, 173—historic and scientific obligations to heraldry, *ib.*—heraldic mottoes, *ib.*—spirit of, *ib.*—prevalence of Latin, 174—battle cries, *ib.*—religious mottoes and devices, *ib.*—patriotic, *parlante*, and punning mottoes, 175—mottoes derived from events, *ib.*—initial mottoes, 176—motto of de Guzman, *ib.*—of the Earl of Rothes, *ib.*—sentiment of mottoes, *ib.*—disuse of heraldry in republican countries, 177—military medals, *ib et seq.*

Herschel's, Sir John, mode of statistical procedure, 271—astronomical hypothesis, 333—on form of earth, 334.

Herschel, Sir William, nebulous explorations, 97—stellar and nebulous classes, *ib. et seq.*

History and Biography, 195, *et seq.*

Hollyand's, J. G., Kathrina, reviewed and criticised, 170 *et seq.*

Holland, Sir Henry, infusorial life injurious to human, 315.

Home of Tulip noticed, 400.

Hooker, Dr. J. D., on Diatomaceæ, 223.

Huggins, Dr., on spectrum analysis, 336—on nebular hypothesis, 337.

Huggins, Wm., spectrum analysis applied to nebulæ, 107.

Huggins, on the nebulæ in Orion, *ib.*

Huguenots, the, reviewed, 282 *et seq.*

Humboldt, Baron Von, on study of nature, 294—on sea-animalcules, 295—on red hail, 298—on electricity, 353.

Impeachment of President, article on, 372 *et seq.*

Insurance: good, bad, and indifferent, reviewed and criticised, 401 *et seq.*

Insurance Reports, etc, noticed and criticised, 202 *et seq.*

Jansen, Zacharias, maker of compound microscope, 291.

Journey in Brazil noticed, 390.

Juvenal on excessive height of Roman houses, 260.

Kathrina; her life and Mine, in a poem, by J. G. Holland; reviewed and criticised, 170 *et seq.*

Killigrew, Charles, master of revels to Charles II., 247.

Kirchner on influence of infusorial life, 304.

Kirkwood, Prof., on arrangement of nebulous matter, 345—on nebulous theory, 347 *et seq.*

Kolliker, Prof., on microscopic anatomy, 304.

Lafayette, as patriot and soldier, article on, 71—lack of a faithful biographer, *ib.*—personal notes of boyhood, *ib. et seq.*—French character, 72—life in America, 73—peculiar associations, *ib.*—effect upon personal character, *ib.*—arrival at Philadelphia, *ib.*—appointment in Revolutionary Army, 74—reception into General Washington's family, *ib.*—friendship with, *ib.*—its character and continuance, *ib.*—mutual correspondence, *ib. et seq.*—Lafayette's action in the Gates and Conway conspiracy, 75—his self-control, 76—conduct at Yorktown, 77—magnanimity of, *ib.*—during the French Revolution, *ib. et seq.*—advocacy of the States General Assembly, 78—junction with the Third Estate, *ib.*—appointed to command the Citizen Guard, 79—epoch of the middle class, *ib.*—Lafayette's position, 80—condition of popular element, *ib.*—the mob at Versailles, 81—Lafayette

saves the queen's life, *ib.*—approach of the Reign of Terror, *ib.*—combination of Silnitz, *ib.*—march of the allied forces, *ib.*—resisted by Lafayette, *ib.*—affairs in Paris, 82—increasing power of Jacobin club, *ib.*—Lafayette's protest against, *ib.*—analysis of letter to the Legislative Assembly, *ib.*—failure of, 83—visit to Paris, *ib.*—loss of popularity, *ib.*—danger during, *ib.*—accusation before the Assembly, 84—acquittal, *ib.*—inauguration of Reign of Terror, *ib.*—Lafayette's attempt to check it, *ib.*—impotence of, *ib.*—flight to Austria, *ib.*—Lafayette's reason for, 85—result of, *ib.*—refusal to abandon opinions, *ib.*—imprisonment in Prussia, *ib.*—transfer to Olmütz, 86—cruelty of Austrian government, *ib.*—remonstrance of English court, *ib.*—of Washington, *ib.*—of Napoleon at Campo Formo, *ib.*—final release, *ib.*—letters during capitivity, *ib.*—residence in Holstein and Holland, 87—return to France, *ib.*—retirement to La Grange, *ib.*—vote upon life-consulate of Bonaparte, 88—coalition with for national defense, *ib.*—action subsequent to Waterloo, *ib.*—visit to America in 1824, *ib.*—some events of, *ib.*—return to France, *ib.*—action in the Assembly of 1828, *ib.*—approach of Revolution of 1830, 89—publication of ordinances of 26th of July, 90—effect of, in Paris, *ib.*—action of Chamber of Deputies, 91—Lafayette the popular leader, *ib.*—difficulty of establishing a republic, *ib.*—action of Orleanists, 92—Duke of Orleans appointed lieutenant-general and king, *ib.*—endorsement of Lafayette, *ib.*—Louis Phillipe as king, 93—difference with Lafayette in State policy, *ib.*—non-intervention policy, 94—Lafayette's interpretation of, *ib.*—indignation against ministerial action, *ib.*—opposition to, *ib.*—defeat, *ib.*—final official resignation, *ib.*—relative position of Lafayette and Louis Phillipe, 95.

Land of Thor, The, by J. Ross Browne, reviewed and criticised, 191 *et seq.*

Laplace's astronomical hypothesis, 333—theories of solar system, 336.

Laplace on nervous susceptibility, 38.

Layard on sanitary construction of ancient cities, 259.

Leo X., aid rendered to science and art, 118.

Lerchheimer on Tritheim as a sorcerer, 364.

Lewy on variation of atmospheric oxygen and carbon, 303.

Liebig, Prof., on utilization of sewer contents, 283.

Literature, German Mediæval, article on, 136 relative merits of Faust and Parcival, *ib.*—renewed popularity of Fischart's works, *ib.*—analysis of Parcival, 137—epic form of, *ib.*—poetic material of twelfth century, 138—intermingling of French and English romance, *ib.*—distinctive features of, *ib.*—legendary and historical character of Parcival, 139—original of, *ib. et seq.*—legend of St. Graal, 140—its compound origin, *ib.*—nature, 141—Eschenbach's Sir Parcival, *ib.*—the Anjou Chronicle, 142—Chapel of St. Graal, *ib.*—kings of, 143—adventures of Anfortas, *ib.*—of Parcival's father, 144 *et seq.*—birth of Parcival, 146—early education of, 147—adventure with the knights, 148—with Duke Orilus' wife, *ib.*—arrival at King Arthur's court, 149—marriage, *ib.*—Eschenbach's descriptive manner, 150—Parcival's arrival at the St. Graal temple, *ib. et seq.*—silence and departure from, 151—regret for, *ib. et seq.*—the sorceress of the Graal, 152—departure from Arthur's court, 153—Gawain, Obilot, and Parcival, *ib.*—in the forest of St. Graal, 154—at the Châtel Merveil, 155—meeting of Parcival and Feirefis, 156—return to St. Graal, 157—restoration of Anfortas, *ib.*—Parcival's reunion with his wife, *ib.*—passion of Feirefis for Repanse de Schoie, 158—conclusion of poem, *ib.*—literary merit of, 159—analysis of style and treatment, *ib.*

Lucretius' De Rerum Natura, 223.

Luther, Martin, and the Old Church, article on, 108—not a religious controversy, 109—condition of Church in Luther's time, 110—character of its priests, *ib.*—Luther's distaste for preaching, *ib.*—birth and parentage, 111—early training, *ib*—education at Magdeburg and Eisenach, *ib.*—frequent chastisement by instructors, *ib*—study of law at Erfurt, 112—severe illness at twenty, *ib.*—accident, *ib.*—entry to Augustine convent, *ib.*—freedom from menial duties, *ib.*—consecrated priest, *ib.*—piety and despondency, *ib. et seq.*—character of his provincial, 113—of brother monks, *ib.*—study of the Bible not prohibited, *ib.*—appointment as theological professor, *ib.*—unwillingness to accept, *ib.*—argument of Dr. Staupitz, 114—excellence as a preacher, *ib.*—position of Dr. Staupitz, *ib.*—Luther's journey to Rome, 115—incidents of, *ib.*—arrival in Rome, *ib*—salutation to, *ib*—Luther's superstition, 116—penance at Pilate's staircase, *ib.*—return to Wittenburg, *ib.*—declared licentiate of theology, 117—sale of indulgences, *ib.*—reason for, 118—services of Leo X to general science, *ib.*—the Vatican MSS., *ib.*—College of the Sapientia, *ib.*—completion of St. Peter's, 119—character of Tetzel, *ib.*—interference with by Luther, *ib. et seq.*—Luther a believer in purgatory, 120—firm faith in the Church, *ib.*—submissive letter to the Pope, 121—extract from, *ib.*—inconsistent disputations continued, *ib.*—mild action of the Pope, *ib.*—Luther cited to Augsburg, *ib.*—conference with the Pope's legate, 122—renewed submission, *ib.*—second letter of submission, *ib.*—avowed reverence for the Church, *ib.*—public adherence to its dogmas, 123—self-esteem and tenacity of opinion, 124—the Leipsic disputation, *ib.*—bill of ex-communication published, *ib.*—burned by Luther at Wittenburg, *ib.*—public preaching against the Church, 125—summoned before the Diet of Worms, *ib.*—liberal action of Diet, *ib.*—honourable treatment during, *ib.*—reply to, *ib*—argument with archbishop of Treves, 126—Luther's learning and genius, *ib.*—gratitude for protection publicly expressed, *ib.*—violation of conditions of, *ib.*—removal to Wartlung, 127—return to Wittenburg, *ib.*—interdict of works, *ib.*—nullity of, *ib.*—publication of opinions respected, *ib.*—true cause of schism, *ib.*—personal nature of, *ib.*—character and power of eloquence, *ib.*—general causes favouring the Reformation, *ib. et seq.*—ecclesiastical enlightenment and wealth, 128—status of nuns and nunneries, *ib.*—Luther's wife, *ib.*—Henry VIII. opposed to Luther, *ib.*—his change of opinions, 129—intellectual status of monks, *ib.*—learning of Erasmus, *ib.*—as a reformer, 130—compared with Luther, *ib*—the Church not always declared infallible by its supporters, *ib.*—liberality of opinion among Church dignitaries, *ib. et seq.*—Copernicus educated and assisted by monks, 131—intellectual cultivation in Luther's time, *ib.*—his own superstition, 132—various conflicts with the devil, *ib.*—opinion of physical diseases, *ib.*—estimation of reason, 133 *et seq.*—scientific knowledge, 134—state of Church at beginning of Reforma-

tion, 135—influence of printing press upon, *ib.*—other conditions favorable to, *ib.*

Macaulay on London streets in Charles II.'s reign, 208 *et seq.*

Magnetism, animal, article on, 23—popular idea of, *ib.*—investigation of, *ib.*—its existence in France and Germany, *ib.*—nature, 24—symptoms, *ib.*—conditions and results, *ib.*—are they real or imaginary, *ib.*—investigation in Paris, 25—Mesmer on animal magnetism, *ib.*—his process described by Dr. Bouillaud, *ib. et seq.*—persons and substances magnetized, 26—present magnetic process, *ib. et seq.*—requisite conditions for trance, 27—M. Deleuze on, *ib.*—M. Rostan on, *ib. et seq.*—investigation of magetism by Academy of Sciences in 1784, 28—by Royal Society of Madicine, 1784, *ib.*—committee of investigation *ib.*—experiments of Deslow before, *ib.*—of Academy of Science, 29—of Dr. Franklin at Passy, *ib.*—final decision on, *ib.*—Academy of Medicine in 1825, 37, *ib. et seq.* Revue Medicale on Mdlle. Pigeaire, 30—experiments on Mdlle. Prudence, *ib.*—counter experiments, 31—explanation of, 32—characteristics of magnetic subjects, *ib. et seq.*—of magnetizers, 33—of Dr. Dupau, *ib.*—nervous influence, 34—natural sympathies and antipathies *ib.*—sympathetic physical ailments, 35—convulsionists of Civennes, *ib.*—Dr. Eyne's treatment of a convulsive subject, *ib.*—effect of imagination, 36—faith in magnetism, *ib.*—mental influence on, *ib.*—physiology of, 37—Dr. Virey on, *ib. et seq.*—Laplace on the nervous system, 38—nervous aberrations, *ib. et seq.*—acute senses in animals, 39—action of nervous sensibility, *ib.*—somnambulism, *ib.*—magnetic sleep, *ib. et seq.*—production of, 40—lucid somnambulism, *ib. et seq.*—rapport between magnetizer and subject, 42—magnetic paralysis, 43—somnambulic sight, *ib.*—abnormal vision, 44—experiments by Rostan and Ferrus *ib. et seq.*—absurdity of, 45 *et seq.*—deception of savants, 47—unworthy miracles improbable, 48—supernatural agency, *ib.*—moral danger of magnetism, 49 *et seq.*—testimony of physicians, 50—of M. Rostan, 51—magnetic phenomena phys cally possible, *ib.*—characteristics of true science, *ib.*—these wanting in magnetism, 52—theory of the nervous fluid, *ib.*—contradictory character of magnetism, 53—curative value of, *ib.*—evil results of, *ib. et seq.*—its position as a system undetermined, 54.

Malpighi, Marcellus, microscope applied to medical science by, 302.

Mayer, Dr., on solar heat, 348.

Maxwell, Prof., on nebulous disintegration, 345.

McGowan, Dr., on meteoric dust in China.

McCulloch, Hugh, as a financier, 56 *et seq.*

Mettits, Cardinal, and Luther, 12.

Menander, article on, 1 *et seq.*

Microscope, the, and its discoveries, article on, 289—multitude of animalcules, 29—belief in supernatural beings, *ib.*—tardy recognition of microscopic power, *ib.*—application of, to science, *ib.*—science experimental, 291—facts necessary to found conclusions, *ib.*—importance of instrumental aid, *ib.*—microscope known to Seneca, *ib.*—first compound instrument, *ib.*—Galileo's microscope, *ib.*—Fontana's, *ib.*—Tulley's achromatic object-glass, *ib.*—investigation of microscopic power, *ib.*—description of instrument and adjuncts, 292—infusorial life, *ib. et seq.*—examined by Chernberg, 293—completeness of, *ib.*—varieties of, described, *ib.*—water coloured by, *ib.*—characteristics of Polypes, 294—Momtell on life of, after sub-division, *ib.*—Ehrenberg's classes, *ib. et seq.*—Polygastria described, 295—Rotifera, *ib.*—marine animalcules, 296—in polar regions, *ib.*—prolific nature of, *ib.*—effect upon colour of water, 297—waters of China and Red Seas, *ib.*—sand shower at Shanghai, *ib.* chemical analysis of, *ib.*—at Genoa, *ib.*—red snow and hail, *ib. et seq.*—dates of blood rains, 298—Ehreuberg's Diatomaceæ, *ib.*—living bed of, under Berlin, 299—mountain meal, *ib.*—elementary botanic tissue, *ib.*—fibrous varieties, *ib.*—cellular deposits, 300—raphides, *ib.*—fossil woods, *ib.*—mosses, lichens, etc., *ib.*—crystalline formations, *ib. et seq.*—murixide, 301—cellular formation common to all organizations, *ib.*—microscope applied to physiology, 302—microscopic anatomy, *ib.*—first study of, *ib.*—application by Bichat, *ib.*—by Dr. Schwann, *ib.*—results of, 303—miasmatic diseases microscopically investigated, *ib.*—atmospheric gaseous variations, *ib. et seq.*—infusorial life poisonous to human, 304 *et seq.*—analogy between cholera and infusorial visitations, *ib.*

Mollien, M., on colour of China Sea, 297—on sand rain at Shanghai, *ib.*

Momtell, Dr., on Polype life, 294

Morris, Dr., on bone boiling, 226 *et seq.*

Morvan Lez Breiz the original of Eschenbach's Sir Parcival, 139 *et seq.*

Napoleon and Council of Ten, 308.

Napoleon stipulating Lafayette's release at Campo Formio, 86.

Navigations Françaises, Les, par Pierre Margry, noticed, 197 *et seq.*

Needham, Marchmont, literary life of, 211 *et seq.*

Nightingale, Florence, on importance of statistics, 271.

Norwood, noticed, 400.

Notices and Criticisms, 197 *et seq.*

Nyander, infusorial life injurious to human, 305.

Opportunity, a novel, by Anne M. Crane, reviewed and criticised, 186, *et seq.*

Opposite Neighbors, or Two Lives and their End, reviewed and criticised, 189 *et seq.*

Orphan of Glen Eider, reviewed and criticised, 189 *et seq.*

Orso, Doge of Venice, assassination of, 302.

Overstone, Lord, on paper currency, 66 *et seq.*

Ovid, on Menander, 11.

Palmerston, Lord, on measures preventive to epidemics, 258.

Paolo, Fra, on treatment of rebellious Venetians, 320.

Paper money, ruinous influence of, article on, 54—importance of national finances, *ib.*—great statesmen always careful financiers, 55—opposed to paper currency, *ib.*—political view of, *ib.*—management of our finances, 56—financial abilities of Mr. McCulloch, *ib.*—unpleasant position of, *ib. et seq.*—advocacy of resumption of specie payments by, 57—Report for 1865, *ib. et seq.*—spirit of and extracts from, 58 *et seq.*—inaction of 39th Congress in financial matters, 59—McCulloch on unjust taxation, 60—evils of a partisan legislation, *ib.*—inconsistent action of Congress regarding paper money in 1866, 61—legal tender currency the cause of great financial difficulties, *ib.*—our present currency not money, 62—its demoralizing financia influence, *ib.*—reconstruction policy of 39th Congress, 62—Mr. McCulloch on, *ib et seq.*—moderation of his views, 64—European political economists on paper currency, *ib.*—misrepresentations of

demagogues, 65—labour "strikes." *ib.*—manufacturers not monopolists, *ib.*—remedy for evil rests with popular vote, *ib.*—views of English economists, 66—the currency system a greater evil in U. S. than in Europe, 67—opinion of Buchanan on the crisis of 1857, *ib. et seq.*—metallic currency a metallic commodity, 69—Webster's speech on the Sub-Treasury bill in 1838, *ib. et seq.*—Mr. McCulloch's reduction of the public debt, 70—eminence as a financier, *ib. et seq.*

Paracelsus' denial of supernatural agency, 354.

Pericles and Athenian demagogues, 367.

Pharmacy, chemical, practised by ancient

Physical Geography, Elements of, noticed, 394. Hindu and Arabic nations, 302.

Piddington, on sand shower at Shanghai, 297.

Pierce, Prof., on sustaining four of Saturn's rings, 345.

Pigeaire, Mdlle., the somnambulist, 30.

Plato on sensitiveness of the liver, 364.

Pliny and Plutarch on Menander, 6.

Pliny on Roman sewerage, 261—on the water level, 263.

Plutarch on Epicurus, 214, 222—on Greek and Roman mythology, 223.

Polignac's, Cardinal, refutation of De Rerum Natura, 223 *et seq.*

Prayers of the Ages, by Caroline S. Whitmarsh, noticed and criticised, 201 *et seq.*

Procopius on Roman cloaca, 261—on Roman aqueducts, 263.

Quintilian on Menander, 12—on Aristophanes, *ib.*

Red Sea, coloured by microscope algæ, 297.

Reichenbach's odic force, 356 *et seq.*

Republic of Liberia, criticised, 39.

Revue Medicale on somnambulists, 3.

Rosse, Lord, on Herschel's nebulæ, 101 *et seq.*

Rostan, M., on conditions requisite to magnetic trance, 27—on somnambulic vision, 44.

Rupert's, Prince, lottery of jewels, 248

Rutgers Female College, catalogue for 1857-8, comments on, 199 *et seq.*

Sanatory science, progress and influence of, article on, 257—ubiquitous nature of contagion, *ib.*—municipal Health Boards, 258—disease incidental to crowded localities, *ib.*—sanitary ordinances among ancients, *ib.*—pestilence before Troy, *ib.*—Agamemnon's action during, *ib.*—ancient rites as sanitary regulations, 259—sanitary construction of Nineveh and Babylon, *ib.*—Grecian gymnasia, *ib.*—architecture, 260—out-door life of ancients, *ib.*—absence of cloaca in Greece, *ib.*—cause of plague at Athens, 261—Grecian institutions reproduced at Rome, *ib.*—cloaca maxima at, *ib.*—health of ancient, 262—sewerage of Colosseum, *ib.*—Roman aqueducts, 263,—Pliny on, *ib.*—public baths, 264—admission fee to, *ib.*—similarity to modern Russian and Turkish baths, 265—existing ruins of, *ib.*—height of Roman dwellings, *ib.*—Juvenal on, 266—care of ancient Roman government for public health, *ib.*—remissness of modern governments, *ib.*—hygiene of cheerfulness, 267—hygienic wisdom of national amusements, *ib.*—epidemics incident to invasion of the barbarians, *ib.*—Hecker on middle age epidemics, 268—inefficient sewerage of London and Paris during, *ib.*—Erasmus on interior of London dwellings, *ib.*—Macaulay on London streets in Charles II 's time, *ib. et seq.*—sanitary condition of Paris, Vienna, and Constantinople, 269—evil of intramural graveyards, *ib.*—excessive mortality of European capitals, *ib.*—causes of, *ib. et seq.*—public carelessness of, 270—importance of statistics, *ib.*—possible results from, 271—Florence Nightingale on, *ib.*—Herschel's mode of procedure in, *ib.*—observed by modern statisticians, 272—by New York Health Board, *ib.*—arrangement of report of, *ib. et seq.*—Paris report, 273—inefficient European records before 1839, *ib.*—remonstrance of London physicians in 1838, *ib.*—Farr's comparative mortality, 247—cause of excessive, *ib.*—English tenement houses, *ib. et seq.*—those of Glasgow, 275—of Bristol, *ib.*—result of sanitary investigation, *ib.*—cause of first cholera in New York, *ib. et seq.*—delay in removing, 276—insufficiency of water supply in large cities, *ib. et seq.*—in London, 277—abundance of in New York and Philadelphia, *ib. et seq.*—necessity for public baths, 278 *et seq.*—Galen's hygienic precepts, 279—cuticle as an excretory organ, *ib. et seq.*—sewerage of cities—280—of London perfected, *ib. et seq.*—described, 281 *et seq.*—utilization of sewerage, 282—advantages of London system, *ib.*—incomplete sewerage of New York, *ib. et seq.*—evil result of, 283—Liebig on sewerage utilization, *ib.*—value to agriculture, 284—insalubrity of abattoirs, *ib.*—Henry VIII.'s law against, 285—necessity for removal beyond city limits, *ib.*—impediments to Health Board's action on, 286—fat and bone boiling rendered innocuous to health, *ib.*—method described, *ib. et seq.*—deleterious gaseous exhalations, 287—prevention possible, *ib.*—action of New York Health Board, *ib.*—personal cleanliness indispensable to health, 288—morally incumbent on mankind, *ib.*—necessity for inculcation among poor, *ib. et seq.*—a great coadjutor of religion, 289.

Sin Graal, legend of, 140 *et seq.*—chapel of, 142.

Schwann, Dr. Th., on microscopic anatomy, 302.

Sciences, French Royal Academy of, on magnetism, 28.

Seminary of Lady of Angels, catalogue of, noticed, 394.

Sensus on Epicurus, 223—on Roman baths, 264—on the microscope, 291.

Shakespeare's plays, early sale of, 237.

Smith, William, his Smaller History noticed, 399.

Spenser's Red Cross Knight, 172.

Spirit Land, Glimpses of the, by S. H. Lloyd, noticed, 201.

Spalding, J. M., Dr., on Luther as a reformer, 130 *et seq.*

Spiritual Wives reviewed and criticised, 386 *et seq.*

St. Albans, Duke of, on heraldic origin, 161.

Staupits, Dr., Luther's character of, 113.

St. Bernard's Glories of the Virgin, etc., translated by a Catholic Priest, noticed, 202.

St. Vincent's College, catalogue of, noticed, 393.

Strickland, Agnes, her Queens of England noticed, 399.

Storch, M., on paper currency, 64.

Struve, M. Otto, on the Orion Nebula, 106.

Suidas, on Menander, 6.

Supernatural phenomena, article on, 349—modern science and, *ib.*—what is the supernatural? *ib.*—reciprocal causality, 350—nature of, *ib.*—distinction between chemical and mechanical processes, *ib.*—mechanical facts easily comprehended, *ib.*—more difficult facts pronounced supernatural, *ib.*—possibility of explanation, *ib.*—magnetic action on iron, 351—determination of the supernatural difficult, *ib.*—realistic tendency of middle age scholars, *ib.*—number of natural forces, 352—Van Helmont's medium between

spirit and matter, *ib.*—Agrippa on, 253—supported by Van Helmont, *ib.*—mutual influence of material particles, *ib.*—origin of astrology, 354—founded on natural principles, *ib.*—reputed magicians real men of science, *ib.*—Tritheim on mesmeric power, *ib.*—Paracelsus disclaims supernatural agency in magic, *ib.*—on power of knowledge, 355—Van Helmont on casuality-relation and material influences, *ib. et seq.*—material antipathies and sympathies, 356—Reichenbach's odic force, *ib.*—material motion influenced by position, 357—odic effect of colour and light, *ib.*—Van Helmont's curious physical relations, *ib.*—physical influence of metals, 358—natural affinities and repulsions, *ib.*—natural sensitives, 359—cultivation of sensitiveness possible, *ib.*—preceding facts applied to medical science, *ib. et seq.*—theory of transplantation, 360—compared to scriptural demoniac possession. 361—medical effect, number, and position, *ib.*—Reichenbach's odic force classified by Keiser as sidenic phenomena, 362—present popular belief in magic, *ib.*—distinction between natural and supernatural arbitrary, *ib.*—relation between self-consciousness and natural objects possible, *ib. et seq.*—fallibility of this relation, 363—existence of second sight, *ib.*—excess of nervous susceptibility, *ib.*—sensitiveness of Swedenborg, *ib.*—Plato on office of the liver, 364—sensitiveness of physical parts, *ib.*—cause of physical blissfulness, *ib.*—sensitiveness of Von Voes, *ib. et seq.*—Moritz and Stilling on sensitives, 365—force of good and evil thoughts, *ib.*—evil of yielding to purely natural influences, *ib. et seq.*—terrible conditions engendered by, 366—revolting crimes committed during, *ib.*—French account of case, *ib. et seq.*—evil of abandoning self-consciousness, 367—sleep *vs.* somnambulism, *ib.*—fits of inspiration, 368—two-fold nature of miracles, *ib.*—Simon, the magician, *ib.*—Leo and Theodorus, *ib.*—Christian miracles ascribed to Holy Ghost, *ib.*—heathen denounced as sorcerers, *ib.*—present spiritual phenomena, *ib.*

Swedenborg's demonstration of distinctive chemical and mechanical conditions, 350—on magnetic action, 351—sensitiveness of, 363

Swetchine, Mdme. Life and Letters of, by Count de Falloux, reviewed and criticised, 196 *et seq.*

System of Geography, Improved, criticised, 397.

Telescope, Herschel's great, 97.

Tennyson, Alfred, legends of King Arthur, 133 *et seq.*

Terence, literary merits of, 11—the Andria of, 19.

Terne, Sir John, on origin of heraldry, 161.

Tetzel and his sale of indulgences, 119.

Travels, 191 *et seq.*

Tritheim on magical results, 354.

Tulley's achromatic object glass, 291.

University of Notre Dame, catalogue of, for 1866-7, etc., comments on, 193 *et seq.*

Van der Weyd, Dr., on parasitic fungi and trichina, 305.

Van Norman School, catalogue of, noticed, 391.

Venetian Republic, the, and Council of Ten, article on, 306—predictions of national fate always possible, 307—generally unwelcome, *ib.*—influence of demagogism, *ib.*—of freedom in Venice, *ib.*—of despotism, *ib.*—moral of her downfall, *ib.*—influence on other Republics, 308—of Council of Ten, *ib.*—early freedom of Venice, *ib.*—ballot system in, *ib.*—Venetian origin 309—establishment of Republic. 385 A. D., *ib.*—of tribunal system, *ib.*—continuance of, 310—national progress under, *ib.*—degeneracy of, *ib.*—nation divided into factions. *ib.*—attacked by enemies, *ib.*—reunion for defence, *ib.*—Anafesto elected military leader, 311—becomes first Doge, *ib.*—increase of his power. *ib.*—non-abuse of, *ib.*—succeeding Doge, *ib.*—military conquests of, *ib.*—assassination of, 312—reason for, *ib.*—election of annual magistrates, *ib.*—deposition and punishment of filth, *ib.*—Doges restored, 313—power of, *ib.*—disagreeable position of, *ib.*—unwillingness of citizens to accept office, *ib.*—punished as treason, *ib.*—decrease of popular power. 314—Great Council established, *ib.*—formation of, *ib.*—popular liberty destroyed by, *ib.*—junction with Council of Forty, *ib.*—gradual formation of aristocracy, 315—Council declared hereditary, *ib.*—consolations offered for popular loss of liberty, *ib.*—visits to outlying territories, by Doge and Council, *ib.*—formation of other governmental bodies, 316—power of, *ib.*—origin of Council of Ten, *ib.*—appointed during civil insurrection, *ib.*—term of office prolonged, *ib.*—declared perpetual, *ib.*—Hallam's remarks on, 317—Hazlitt's views on, *ib. et seq.*—of other European historians, 318—of M. Daru, *ib. et seq.*—ultimatum of Great Council in 1173, 319—first Doge under, *ib.*—true cause of Venetian downfall, *ib.*—tyranny of Council of Ten to citizens, 320—to colonies and provinces, *ib.*—detailed by Fra Paolo, *ib.*—episode of Carrara of Padua, 321—of Carmagnola, 322—of the two Foscari, 323 *et seq.*—appointment of Inquisitors of State, 325—powers and duties of, *ib. et seq.* M. Daru on, 326 *et seq.*—no sanctuary for the "disloyal," 327—the famous "lion's mouths," *ib.*—Venice denounced and excommunicated by the Church, *ib.*—episode of Barbarossa and Alexander III. 328—wedding of Venice to the Adriatic, *ib.*—Church action in affair of Ferrara, *ib. et seq.*—Venetian retaliation, 329—Council of Ten and Inquisitors excommunicated, *ib.*—priests expelled from Venice in consequence of, *ib.*—Church opposed to Fra Paolo, 330—Bossuet's testimony. *ib.*—visible decline of Council's power, *ib.*—abatement of tyranny, *ib.*—last acts of, *ib.*—alliance offered by France and Austria. *ib.*—rejected, *ib.*—French ship fired upon, 331—apology to Napoleon, *ib.*—his proclamation to Venetians, *ib.*—authority of Council denied by, *ib.*—consternation of Council, *ib.*—endeavours to conciliate Napoleon by, *ib.*—his ultimatum, *ib.*—entire submission of Council to, *ib.*—Venetian government under Austria, 332

Virey, Dr., on the operations of magnetism, 37 *et seq.*

Von Helmont, connection between spirit and matter, 352—on natural material influences, 355.

Waiting for the Morning, reviewed and criticised, 189 *et seq.*

Washington, George. friendship for, and correspondence with, Lafayette, 74 *et seq.*

Watkins, Thomas, first English paper maker, 238.

Webster, Daniel, on the insecurity of paper currency, 69 *et seq.*

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CONTENTS OF No. XXXII.

MARCH, 1868.

I.—EPICURUS AND HIS PHILOSOPHY.

II.—ENGLISH NEWSPAPERS AND PRINTING IN THE SEVENTEENTH CENTURY.

III.—PROGRESS AND INFLUENCE OF SANATORY SCIENCE.

IV.—THE MICROSCOPE AND ITS DISCOVERIES.

V.—THE VENETIAN REPUBLIC AND ITS COUNCIL OF TEN.

VI.—PROGRESS MADE BY AMERICAN ASTRONOMERS.

VII.—SUPERNATURAL PHENOMENA.

VIII.—IMPEACHMENT OF THE PRESIDENT.

IX.—NOTICES AND CRITICISMS.

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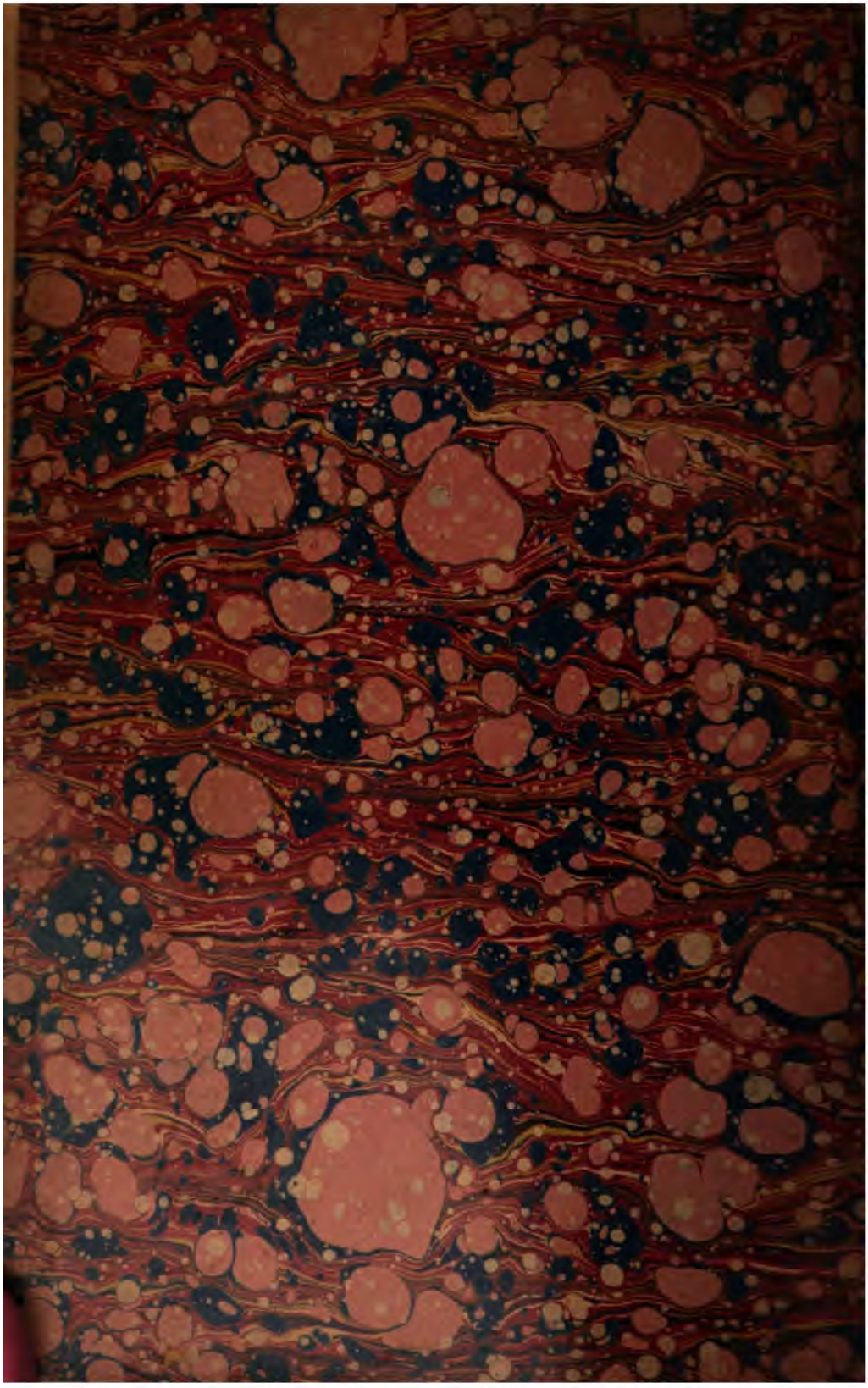

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